Gulstonian Lectures
ON
STERILITY IN WOMAN.

Delivered in the Royal College of Physicians, London,

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LECTURE II.—PART IV.
ITS THEORY OR CAUSATION.

EXCLUDING some remarks as to the influence of marriage in causing sterility in woman, we have shown chiefly the influence of age in its production. Marking out by statistical evidence certain ages as peculiarly affected with sterility, we find at these same ages, in a proportion above the average, excessive families, pluriparity, weakly or idiotic children, &c., and not only in exaggerated proportion, but combined one with another. It is therefore reasonable to describe the sterile ages as ages of imperfect reproduction, and to associate or identify with sterility the conditions of excessive production, pluriparity, &c., which are demonstrated to have alliance with it. In other words, sterility, excessive families, and pluriparity are alternatives one of another, and almost certainly own the same general causes.

I know no cause of sterility or of its allies, excessive production, pluriparity, abortion, &c., that can be compared with age in extent and power. In discussing the cure of sterility, I shall allude to various minor causes which may operate in individual cases, but have no extensive influence. But there are causes which probably have a great place in the production of this condition whose action is only believed, not demonstrated. Such are bad general health, cold, and heat. The influence of bad general health is well observed in plants, but I know no good evidence of it in woman other than the testimony of medical practitioners. The influence of cold and of heat on sterility has been much studied, and attempts have been made to get additional light on the matter by collecting observations of their influence on the age of commencement and cessation of menstruation. The subject divides itself into two portions: first, the influence of cold and heat on women breeding in their native lands; second, the same influence as exerted on women born in cold climates and transported to hot, or born in hot climates and transported to cold. But the data obtained are, in my opinion, quite insufficient for any reasoning being securely based. The hearsay evidence also requires scrutiny. We often hear, for example, of a girl, say of eleven, bearing a child in India, and this is held as proof of early fecundity there. We rarely hear of the same occurrence in this country; and the reason of this alleged greater frequency in India may be not earlier fecundity there, but earlier exposure of a larger number of girls to the risk of becoming pregnant.

There are several important subjects, more or less closely bearing on our inquiry, which I pass by with mention only. Among these is the influence of cold and of heat on the commencement and stoppage of menstruation, an influence regarding which it is scarcely, by the statistical evidence, made probable that cold retards the appearance and hastens the stoppage, though many considerations support this view. Another is the generally accredited influence of nursing in delaying the return of menstruation and the recurrence of pregnancy. Regarding these matters Roberton has made valuable remarks, and collected many, though insufficient, observations. The great subject of interbreeding in its production of sterility I also pass over. The evidence regarding it is very bulky, and requires most careful sifting. In plants and animals the demonstration of this injurious influence of interbreeding in producing imperfection of offspring and sterility is copiously illustrated, and may be said to be well made out; but it is not so in the case of man. Yet, in the case of man, there is a most extensive, though not universal, consensus of intelligent opinion that interbreeding has the same general influence as in plants and animals, and to the entertainment of this view the strong analogy of plants and animals lends powerful encouragement. The injurious influence in man, indeed, probably acts after birth, for there is accumulating evidence that peculiar diseases, specially of the eyes, affect, by preference, the offspring of near relations.

"The evil consequences," says Darwin, "of long-continued close interbreeding are not so easily recognised as the good effects from crossing, for the deterioration is gradual. Nevertheless, it is the general opinion of those who have had most experience, especially with animals which propagate quickly, that evil does inevitably follow sooner or later, but at different rates with different animals. No doubt a false belief may unduly prevail, like a superstition; yet it is difficult to suppose that so many acute and original observers have all been deceived at the expense of much cost and trouble. ..... The loss of fertility, when it occurs, seems never to be absolute, but only relative, to animals of the same blood; so that this sterility is, to a certain extent, analogous with that of self-impotent plants which cannot be fertilised by their own pollen, but are perfectly fertile with pollen of any other plant of the same species. The fact of infertility of this peculiar nature being one of the results of long-continued interbreeding, shows that interbreeding does not act merely by combining and augmenting various morbid tendencies common to both parents; for animals with such tendencies, if not at the time actually ill, can generally propagate their kind. Although offspring descended from the nearest blood relations are not necessarily deteriorated in structure, yet some authors believe that they are eminently liable to malformations; and this is not improbable, as everything which lessens the vital powers acts in this manner. Instances of this kind have been recorded in the case of pigs, bloodhounds, and some other animals." "In the case of man," he elsewhere remarks, "the question whether evil follows from close interbreeding will probably never be answered by direct evidence, as he propagates his kind so slowly, and cannot be subjected to experiment; but the almost universal practice of all races at all times of avoiding closely related marriages is an argument of considerable weight, and whatever conclusion we arrive at in regard to the higher animals may be safely extended to man."

Leaving several minor or little known causes of sterility to be mentioned in the next Lecture, I now turn to other matters in its history which throw light on its theory, and there are two worthy of great consideration. These are the well-known association of dysmenorrhœa with sterility, and the state of sexual appetite and sexual pleasure in sterile women.

Menstruation, when natural or healthy, is attended with no pain, and with little or no disturbance of general health. When there is pain or considerable disturbance of health, the condition is called dysmenorrhœa, and it is plain that the term covers a wide and ill-defined field of disorder and disease. It is with dysmenorrhœa, as thus vaguely defined, that sterility is prevalently believed to be very frequently associated; and there can, in my opinion, be no doubt of the truth of the general belief.

There is a kind of dysmenorrhœa, regarding which I would enter into more details. It is called spasmodic, being regarded as a neurosis characterised by painful uterine spasms, which may be described as having no known object in view. It is often called mechanical or obstructive, terms implying a theory of its cause and implying also that the spasms are, so to speak, intended for the expulsion of the menstrual fluid accumulating in the uterine cavity and distending it. There is no good evidence of the mechanical obstruction, nor of the accumulation of menstrual fluid, nor of the dilatation of the uterine cavity, nor of the use of the painful uterine contractions; and as all admit the presence of these contractions or painful spasms, I shall call this kind of dysmenorrhœa spasmodic. It is a kind of dysmenorrhœa that is gradually, and I think justly, restricting to itself alone this term—the only real, positive, recognisable uterine dysmenorrhœa, or the dysmenorrhœa proper.

It is of this dysmenorrhœa proper that I am now to speak, and it is known by the following characters. It may occur at any time during the flow of menses, sometimes even before it begins; and, in cases of amenorrhœa, it may occur at the time of the menstrual molimen. In the very great majority of cases it occurs on the first or second day of the flow, and it is generally severer when the flow is scanty than when it is copious. The pain is constant or in pangs; and the pangs may be more or less distinct—in other words, the intermissions of the pain may be more or less complete. The frequency of the pangs varies, five to ten in an hour being common. The pain is rarely accompanied by bearing down, strangury, or tenesmus. It varies in severity, rising occa-

sionally to the intensest agony, with cold sweats, vomiting, and other symptoms of prostration or collapse. Suffering from it the patient rolls about and groans, and the restlessness is not that of fever, but of griping pain. It may last only a few minutes, but generally it goes on for hours, the number of hours rarely exceeding four or five. It rarely returns during the current menstrual period. It is generally aggravated by marriage. In women who suffer from this disease there is a super-sensitive condition of the interior of the body of the uterus, and, I think, especially of the internal os uteri, this condition being tested by the contact of a uterine probe or sound.

In making inquiries as to the connexion of this dysmenorrhœa proper with sterility, I have frequently, but not always, satisfied myself of the presence of all of these characters. Particularly, I have not classed with this dysmenorrhœa any case in which the severe pain lasted more than a day. In all inquiries as to pain, there is, owing to the indefiniteness of language and the tendency of patients to exaggerate or make light of their troubles, extreme insecurity of statistical statements. I have tried to avoid being misled in 332 cases which I have, during the last five years, taken down in my notes. These 332 cases were all absolutely sterile—that is, all women who had had an abortion or a child are excluded. Of these 332 married women 159 suffered from spasmodic dysmenorrhœa, or nearly half. It is a most grave fault in my argument that I unfortunately cannot give the frequency of dysmenorrhœa among the fertile. But I can meantime only declare the importance of the omission and express my belief, in accord with universal professional opinion, that among the fertile dysmenorrhœa is comparatively uncommon. The connexion of a neurosis of this kind with sterility cannot be unimportant, and I cannot leave the subject without expressing my belief of the association of it with abortion and miscarriage also.

Other mutually allied neurotic conditions demand full consideration—namely, sexual appetite or desire and sexual pleasure or satisfaction of the appetite by coitus. In investigating the matter great difficulties are met with from the delicate nature of the inquiry, the difficulty of making sure that the patient understands clearly what is the question to be answered, and the impossibility of finding words of well-defined meaning, or of the same meaning in different mouths. But these difficulties are not insuperable, and error is lessened by relying on a large number of concurring observations.

Sexual desire and pleasure have to be considered separately, because, though they are naturally found combined in the same case, they are far from being invariably so. A woman, with healthy sexual organs, may have sexual desire and no pleasure, or even the reverse, and she may have no desire and yet have pleasure. Although pregnancy and childbearing are natural consequences of sexual desire and pleasure, there is little or no connexion between the latter and the wish to bear children. The desire for offspring may be intense, while there is neither desire nor pleasure, and the desire to avoid pregnancy may be intense while there is desire and pleasure. Desire and pleasure may be excessive, furious, overpowering, without bringing the female into the class of maniacs. They may be temporary, healthy, and moderate; they may be absent or null. Instead of sexual desire there may be sexual aversion; and instead of sexual pleasure there may be only feelings of disturbance or pain. Instead of sexual desire there may be intense sexual antipathy, and instead of sexual pleasure there may be severe suffering, even agony in coitus.

The variations of desire are chiefly on the positive side, greater or less. Desire may be absent. From the zero or indifferent condition there is, however, not rarely observed a rise into aversion or antipathy, and this, in married women, without any feeling regarding the husband other than affectionate. It is well known that desire may be fostered at special times by various stimulants of passion; but, apart from such occasions, it may be increased or diminished or annihilated. This is a general belief, and I have frequently had spontaneous testimony of individuals to the same effect. The influence of society and its amusements, of diet, of special kinds of reading, of association with males, is well known and recognised in the increase of sexual desire; and the influence of the opposite conditions, of a truly ascetic life, is equally certain. Desire may, during the childbearing period of life, undergo great changes without any apparent cause; at one time, and it may be for years, being positive, at another time absent or negative.

Sexual pleasure must not be regarded as in all respects like sexual desire, and requires separate description. Its variations are chiefly on the positive side. It may be absent. Its variations on the negative side are, however, most remarkable. There may be slight or very great suffering, or the intensest agony; and this is often accompanied by more or less active involuntary local sphincteric resistance to penetration, called vaginismus. But the words pain and agony are here used in a quite extraordinary and misleading way. There is no pain, such as that of the infliction of a wound or contusion, or that of toothache or neuralgia. There may indeed be, in cases of diseased sexual organs, common pain of the kinds mentioned, caused by sexual congress, but of such pain we are not here speaking.

All kinds of pain or discomfort in coitus are often, nowadays, classed as dyspareunia, but I think the word may be well restricted to the condition I am describing; or the condition may be called simple dyspareunia, and there is no common pain in simple dyspareunia. It has an analogue in disgust, but dyspareunia rises to far higher degrees than disgust. As sexual pleasure rises in intensity above all other kinds of pleasure, so dyspareunia reaches degrees exceeding those of the intensest disgust. The disgust of a child is often painfully intense, its resistance to tasting and swallowing involuntary and powerful, and often followed by vomiting the matter whether tasted or not; and as all this is not common pain in tasting and swallowing, so dyspareunia is not pain in sexual connexion. Sexual pleasure and dyspareunia differ from gustatory pleasure and disgust in this, that while the former are one in kind and in all degrees excited by the same cause, the latter are various in kind, and elicited by different substances in each case. Pleasure, then, may vary from the intensest to mere indifference; and simple dyspareunia may rise from mere indifference to the highest degree, with sphincteric resistance to penetration, opisthotonos, and a state almost of insensibility.

Pleasure is probably not directly increased by the causes of increase of desire, but the increase of desire is probably a cause of increase of pleasure, as hunger enhances the pleasures of taste. Pleasure is increased by continence and diminished, or annulled, or converted into slight dyspareunia by over-indulgence. Sexual pleasure may vary without apparent cause, disappearing for short periods or for years, and reappearing with the same appearance of caprice. Pleasure is frequently absent at marriage, and gradually developed during the continuance of that state. If it is slight at marriage, then coitus will be painful, the common and not simple dyspareunic pain overpowering the pleasure and preventing it.

Describing the lower animals in this respect, we guess by aid of analogy, but the analogy is so strong as to endow the guess with a high degree of assurance, reaching nearly to certainty. We may be sure that animals, generally, feel sexual desire, and that this sexual desire occurs normally or naturally only in connexion with fecundity. In many domestic, or otherwise well-known, animals there is sexual desire only in the rutting season, and at other times not only an absence of sexual desire, but a positive sexual antipathy. A bitch not in heat will angrily resist any attempt at sexual approach by the male, while quite ready for any other kind of play. Of sexual pleasure in female lower animals we know very little, but we may be sure it exists. Of its existence in males we have abundant evidence, and we may thence argue that it exists in females. Nothing is commoner in dogs than what may be called masturbation. This kind of sexual pleasure is generally believed to be increased by confinement, and the evidence afforded by zoological collections is held to be good.

I know nothing regarding the connexion of sexual pleasure in animals with fertility or sterility, but we have the testimony of Darwin to the presence, in animals that are confined, of sexual desire, sometimes in excessive degree; sexual indulgence being held as evidence of sexual desire; and the sexual excess is often connected with sterility. "Monkeys," says he, in the Nine-Year Report from the Zoological Gardens, "are stated to unite most freely, but during this period, though many individuals were kept, there were only seven births." Elsewhere he says, that "although many of the felidæ breed readily in the Zoological Gardens, yet conception by no means always follows union. In the Nine-Year Report, various species are specified which were observed to couple seventy-three times, and no doubt this must have passed many times unnoticed; yet from the seventy-three unions only fifteen births ensued." In many

animals under confinement there is no coupling, and this may be assumed to indicate absence of desire in female as well as male.

It is an almost universal opinion that in woman desire and pleasure are in every case present, or are in every case called forth by the proper stimulants. The opinion is founded on experience, and it is, no doubt, nearly true; but the exceptions to the rule are numerous and important. It is also a popular opinion that desire and pleasure are essential elements in fecundity, and in cases of rape followed by pregnancy, that consequence has been made ground of defence against the charge. Great authors, among whom is Ambrose Paré, recommend the excitement by dalliance of great desire, as a remedy of sterility.

I think it is very nearly certain that desire and pleasure in due or moderate degree are very important aids to, or predisposing causes of, fecundity, not on account of their own proper attractiveness, but on account of some connexion between them and the perfection of other parts of the complicated proceedings which result in fecundation. But this is only a firmly held opinion, for I can give no conclusive evidence or proof of it; and this absence of proof diminishes greatly the value of my observations on the absence of desire and pleasure in the sterile. The want most acutely felt here is a knowledge of the state, in this respect, of the fertile. In producing evidence as to the sterile, I shall assume that sexual desire and pleasure are very rarely absent in the fertile. Excess of sexual desire is probably unfavourable to fertility. It is recognised chiefly by excessive indulgence in sexual pleasure, and is observed in the weak and ill-conditioned, in imbeciles and idiots, as it is also in animals under confinement. Excessive indulgence in sexual pleasure is also probably unfavourable to fertility, or a cause of sterility; and it probably is specially influential in the young, as it may also be in prostitutes. In these circumstances the births of females are, on good grounds, believed to be far above the ordinary average, in proportion to males.

Masturbation in females is an unnatural and generally excessive indulgence in artificial sexual pleasure. It has always appeared to me to affect especially children and young women of weak mind. I have often been struck by the smallness or imperfect development of the external parts in young women who masturbate, and I have not rarely observed what appeared excessively high development of sexual desire in women who had imperfection or absence of internal genital organs. In one, dissection revealed the presence of ovaries and Fallopian tubes only. Some confirmation of these views may be found in cases such as that of Campbell,[1] in which a woman addicted to masturbation had never menstruated, and had imperfectly developed genital organs; she had, however, also a dermoid cyst of the ovary. Aran[2] has a case, of what he describes as frightful excess of masturbation, in a young woman dying of phthisis, whose uterus and appendages were found to be very imperfectly developed. Kussmaul[3] mentions the concurrence of masturbation and nymphomania with imperfect development of the uterus and the genital organs; and Joulin[4] refers to a case of Vaddington's where absence of uterus and exaggerated sexual appetite were combined.

Entire absence of desire and pleasure, or of one of them, or the presence of intense sexual antipathy and dyspareunia are not necessarily causes of sterility. It is not at all rare for women to be pregnant and bear healthy children who aver in the distinctest manner not only absence of desire and pleasure, but presence of the opposite conditions. But the following statistics make it highly probable that absence of desire and pleasure and the presence of their opposites are powerful influences favourable to sterility. The statistics do not indicate what was occasionally found—namely, that desire was present while pleasure was absent; or, in other cases, that desire was absent while pleasure was present. The cases observed were all in women absolutely sterile, of whom the great majority consulted me regarding the sterility. Among 191 sterile wives desire was absent in 39, or in about 1 in 4. Among 196 of the same sterile wives pleasure was absent in 62, or in about 1 in 3. The figures show that many sterile wives had desire but no pleasure. They do not show, what nevertheless is true, that some had pleasure who had no desire. (See Table XXIII.)

I have a strong impression, derived from all I know and have observed, which I may express theoretically, that while in healthy normal women there is abundance of sexual or reproductive energy for fertility and all its accompaniments, in many sterile, or relatively sterile, women, there is deficiency which may be exhibited in one or another, or in all the ordinary evidences of reproductive energy, and that excess or deficiency in one department may be associated with deficiency or excess in another. It would seem that in women of deficient reproductive energy, excess in one department might be compensated by deficiency in another, and *vice versâ*, there being only a limited store of the original energy. In illustration, a remarkable class of cases may be cited, which I shall sufficiently describe by stating generally the chief points in one:—A robust healthy woman is married at eighteen; she bears three children and has four miscarriages before she has passed twenty-three years of age. Up to the birth of her last child, and for five years subsequently, she experiences no sexual desire, and has no pleasure. Five years after her last pregnancy she almost suddenly comes to have intense desire and pleasure, but remains sterile for four additional years before she seeks a cure of her sterility. Fertility present, while desire and pleasure are absent: sterility present, while desire and pleasure are present.

TABLE XXIII.

Case-book Table of Desire and Pleasure in Sterile Women.

Age at marriage.	Number.	Desire.			Pleasure.		
		Present.	Absent.	No note.	Present.	Absent.	No note.
Fifteen to nineteen	59	18	4	37	15	8	36
Twenty to twenty-four ...	220	78	18	124	69	27	124
Twenty-five to twenty-nine	134	35	12	87	31	18	85
Thirty to thirty-four	59	16	3	40	14	5	40
Thirty-five to thirty-nine ...	23	3	1	19	3	3	17
Forty to forty-five	9	2	1	6	2	1	6

[1] Memoir on Extra-uterine Gestation, p. 30.
[2] Leçons Cliniques sur les Maladies de l'Utérus, p. 89.
[3] Von dem Mangel, &c., der Gebärmutter, S. 74.
[4] Accouchements, p. 138.

HOSPITAL FOR DISEASES OF THE CHEST.—The sixty-ninth annual Court of the Governors of this institution was held on the 15th inst. The number of patients who had been treated during the past year was 7000—a larger number than in any previous year. The receipts had been less than in former years, and the Council had been obliged to borrow £700 from the building fund.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. At the meeting of the Birmingham and Midland Hospital for Women, on Tuesday, an anonymous donation of £1000 was announced for a convalescent home for sick nurses and the patients. The Rev. R. T. Lancaster bequeathed £500 to the Cheltenham General Hospital and Dispensary.

Croonian Lectures
ON
MODERN THEORIES AND TREATMENT OF PHTHISIS.

Delivered at the Royal College of Physicians, London,

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LECTURE II.—PART I.

MR. PRESIDENT AND GENTLEMEN,—In my former lecture I had to ask your indulgence while we considered in review the several theories regarding the nature of phthisis which prevailed up to a quite recent period. The necessity for this retrospect will, I hope, be apparent as we proceed to an analysis of the present pathology. Nor, as I trust, will it prove impossible to reconcile the various views of many observers, who saw only by the light of existing pathology, and could scarcely be expected to prophesy of the future. In so far as they were skilled observers and faithful recorders of what they saw, their records are invaluable and necessary portions of our knowledge; no additions which can be made, and no theories which could be started, can do away with the foundation of facts thus established. The reasoning from such may vary, and prove to be true or unstable; but the record is imperishable, and has become the property of all succeeding generations of pathologists. The great danger has been at all times a too exclusive method of arguing from a few facts, and more injury than can be estimated has resulted to the study of phthisis from regarding it as a special affection, and so separating it from the great mass of general pathology. It is possible that many, if not all, diseases are specific in one sense—that is, they may have a peculiar and individual cause, and an undeviating course in dependence on it, and to this view the modern pathology undoubtedly tends; yet that any affection stands outside the general laws of diseased action and may be studied apart from others would be an error misleading in the study of that individual disease, and which must inevitably result in mistakes.

We have now arrived at the germ theory of phthisis, having examined those of the French and German schools which preceded it, and, so far as we are able, the English mind on the subject; and as I hold it impossible to subject phthisis to an isolated examination, and to regard it as separated from general pathology, I shall take the liberty of examining briefly the whole theory of the induction of diseases from germs introduced from without, as well as the disorders resulting from their introduction into the economy of the living body, and the method of their multiplication in the system, with the symptoms thereby induced. We shall then examine the phenomena of phthisis from this point of view, comparing its symptoms with those of other affections which are recognised as due to a similar infecting cause.

In the outset, let us observe that the argument regarding the introduction of germs, parasites, or septicæmia into the living body implies a recognition of the localisation of disease. None of the theorists argue that the whole system is at once infected. There is a given starting-point, be it the wound or inoculated spot, and even when the breathed air has introduced septic or specific germs into the blood by the lung, it must, and does, soon find a local centre in which it forms a nidus, and whence it spreads by some of the methods we shall consider. That each specific germ has a point of selection, or a locality, in which it can especially grow and multiply, is an observed and necessary part of the infection. Thus the typhoid germ selects the mucous glands of the intestines, and the poison of rabies the brain and nerve centres, probably the pons. From this consideration it is evident that there are structural or other peculiarities of certain localities in the body in which they differ from other parts. To carry this view higher, it may be almost considered that the proposition of Bichat is true, and that the various tissues are possessed of a particular life. The modern theory would seem to show that you can poison the individual life of certain tissues, as the nervous, or at least that certain infectants address themselves peculiarly to particular structures of the body, and there find a centre in which they flourish, and in which alone they can germinate and fructify. Bichat taught that the life of superior organisms, as man, is not due to the action of a unique central force, but to the ultimate result of the particular lives of the various tissues which enter into their composition. The organism of an animal he likened to a federal State, and the elementary cells to the citizens. Virchow, in his Cellular Pathology, especially studies to discover the causes which interfere with the life of the ultimate tissues of the body, and he thought that a great number of the disease-producing causes are living beings, vegetable and animal, which live as parasites at the cost of the human organism. There is no doubt therefore that long before there was any discovery of infecting germs the pathological mind was being prepared for the new theory. It was no longer sufficient to recognise a blood-poison acting by indescribable means on the whole system, devitalising and destroying it in totality, but it was seen that the death of particular parts of the system was possible, and that certain poisons addressed themselves to certain structures. This was proved to be true of chemicals introduced from without, as lead, which affected the muscles, or antimony, which is found in the solid viscera. It is but a step from this to recognise that certain germs manifest a selection for certain parts of the human body, and this was seen in the days before microscopes, in the known habitats of hydatids in the liver, lungs, and brain, in the lumbricus in the small intestine and the ascaris in the rectum. In 1835, Owen found the trichina, and Virchow somewhat later described the fever dependent on these parasites and their peculiar site in the muscles. There are, doubtless, other examples, but the foregoing will illustrate the fact that the localisation both of certain poisons and of certain parasites was known. In 1836 Latour gave the name of torula cerevisiæ to the ferment which converts sugar into alcohol and carbonic acid. The vegetable nature of certain germs, and their power of indefinite multiplication, by assimilating to themselves all the materials of an organism to which they are exposed, till "the whole lump be leavened," must have struck many thoughtful observers. The experiments of Schwann at Berlin in 1837 proved that meat can be preserved from putrefaction by keeping it from the air or by subjecting the air to a high temperature, and upset the theory previously held that septic processes are due to oxygen. Thus we arrived at the fact that putrefaction is caused by organisms springing from germs in the air, and that heat can deprive these germs of their vitality. As the torula converts sugar, so germs convert albumen. In both instances the minuteness of the agent is remarkable. It was found that putrefying pus contains myriads of vibriones or jointed bodies which arose by a process of self-multiplication out of similar bodies by segmentation, or fissiparous generation. Pasteur's well-known experiments confirmed these results and largely extended them, and it was thus established that the atmosphere is filled with myriads of such germs, found indeed less abundantly on the tops of the Alps, or in equatorial parts, but literally everywhere. From hence has arisen the well-known methods of Professor Lister, who has applied the knowledge of these facts with such splendid results to operative surgery.

In 1866, Rindfleisch first noticed bacteria in the organs of those who died of traumatic infective disease, as pyæmia and puerperal fever in the form of pinhead deposits in the heart and muscles. Later on these become filled with a thin fluid pulp. These cavities contained vibriones, which afterwards penetrated between the fasciculi of the muscles, and then into the muscular fibre. They were found in the heart and kidney, and finally in the blood. The unhealthiness of a wound was found to be in direct proportion to the number of spheroid bacteria in its pus, and general infection was held to be due to bacteria in the blood. Further observations demonstrated the existence of micrococci in the bullæ of erysipelas, and in the lymphatics on the edge of the erysipelas. Bacteria were also found in the pus of phlegmonous abscess, in its walls, and in diphtheria. In the latter diseases they penetrate deep layers of tissues and lymphatics. When traumatic infective diseases set in the discharges become putrid. Anthrax is remarkable for the uniform presence of bacteria. These were also found in scarlet fever, small-pox and typhus, as also in cholera. The two tests of microscopical examination and chemical reaction were applied by Koch to these parasites in septi-

cæmia, and the diseases we have named, and a third and most important one, inoculation. In form the bacilli are found either as bacilli or micrococci, as chains of granules, or rods, or long oscillating threads. Koch thinks that a distinct bacteric form corresponds to pyæmia, septicæmia, erysipelas, gangrene, and spreading abscess; but Naegele says, "I have for ten years examined thousands of different forms of bacteria, and I have not yet seen any absolute necessity for dividing them even into two distinct species." It is certain, therefore, that a peculiar morphological form is common to several diseases, as pyæmia, diphtheria, small-pox, and cholera; yet even Koch is struck by the difficulty, and says that it is impossible that all these diseases can be produced by one parasite, and asks, although the bacteria appear the same, may there not be a difference, just as the sweet and bitter almond look alike, but have important chemical differences? Chemically it has been found that bacteria resist acids, alkalies, and ethers, but are demonstrable by their absorption of certain aniline dyes; and it is to this fact, as is well known, that we owe their recognition with certainty. It is possible to remove the albuminoid structures in which they are imbedded and leave the coloured vegetable parasite.

The experiments by Davaine on inoculation of animals with putrid matters are well known, and the remarkable fact discovered that by transmitting the infection through a series of animals the germs are not exhausted, but multiplied, so that at last he succeeded in producing the characteristic effects by using the trillionth part of a drop of blood. He thus infected successively twenty-five animals. He used diverse fluids, from scarlet fever, puerperal fever, small-pox, typhus, and always found bacteria in the blood. He also produced diphtheria and erysipelas artificially in animals. He found (as did Koch) that bacilli grew into the vessels and entered the circulation through spaces in their walls. They penetrate the white corpuscles of the blood, the capillaries and large veins, and appear to have entered the system by the subcutaneous cellular tissue in the neighbourhood of the spot inoculated. It is found that when the bacilli disappear the disease can no longer be produced by inoculation. The animals made use of in these experiments were rabbits and mice; but Koch distinctly states that the septicæmic bacillus cannot be inoculated on every animal, and often failed in mice. On the other hand death occurred in twenty-four hours after inoculation with the smallest drop of blood from anthrax, and the lungs, liver, spleen, and capillaries were found filled with bacilli. The well-known experiments of Pasteur and Klebs, which have been called the culture of germs, offer much evidence on the difficult and disputed question as to each disease in which bacilli are found having a separate parasite which is capable of identification. Taking a material presumed to contain an infective virus and others, they have by exposing it to certain conditions of temperature and free access of oxygen found one germ specially grow, and its infecting power increase more than the others. A preponderating development thus obtained in one germ is found to have stronger infecting powers than the others in the mass examined. By successive experiments the one infecting germ is isolated. To this have been applied both the inoculation test described, and also the chemical. Thus it has been observed that the bacillus of anthrax does not colour with fuchsine, while that of leprosy does. Crudeli is of opinion (and no one has more thoroughly adopted the germ theory) that in the greater part of cases there is no proof of different kinds of bacilli except from pathological effect, and that we must obtain the morbid ferment isolated from every other substance with the greatest clinical care. He acknowledges that the entrance of septic ferments into the blood is not always followed by disease, and contends that for such production of morbid effects they should necessarily find a home in the body, and there grow and form a colony.

I have hitherto considered septicæmia and the opinions of experimenters on the so-called ferment and on the parasitic bacteria presumed to be the essential cause. But we are aware that many other diseases besides those named are referred to the same cause—namely, germs entering the system from without, and amongst these are found malarious fevers, and notably tubercle. Before proceeding to discuss the latter I would state in a condensed form the physiological and pathological reasons assigned by the eminent originators of the doctrine of germs both for and against the theory. Pasteur argues that all contagious endemic and epidemic diseases result from ferments. All infectious diseases are due to living beings capable of multiplying in the organism. He argues from the disproportion between the determining cause and the effect—the quantity of the poison introduced in relation to the gravity of the resulting disorder; and, secondly, from the reproduction of infecting material in the organism in enormous quantities.

Chemical ferments do not augment in quantity, although they produce changes in the composition of other substances. In living ferments they always go on increasing in proportion as the fermentative process advances; precisely what occurs in the specific agent of each infection during the course of the specific disease. The incubation period is remarkable. In chemical ferments we should see the specific action always show itself till it had met with all the material in the organism which it was capable of decomposing; but in animal ferment there is always an incubation found, more or less long, till the germs are evolved of all the living organisms which constitute the disease. It may be supposed that these remarks apply only to diseases of infection or contagion, like scarlet fever or erysipelas; but it will be seen that they are made with regard to the most chronic affections attributed to parasitic origin, as tubercular diseases and also to malaria and rabies. The duration of the incubation period varies according to the species of the infecting agent. It is short in the acute exanthemata, longer in others of milder course. Tuberculosis has a latency of twenty days, and rabies often a period of years. As is well known, Pasteur reduces the period of incubation of rabies by inoculating direct into the brain. The poison is thus at once fixed in its bed of choice instead of having to make its way to it through various tissues (during which time it is latent), and the well-known symptoms can be produced in a few days. He has no doubt that a living organism causes rabies, which finds in the brain the conditions for its development and multiplication.

The cyclical course of diseases so originated is also dwelt on in proof of their parasitic origin. In all acute miasmatic affections the stages of disease can only be explained by the progressive multiplication of a living ferment in the body. This is followed by the death of the organism, when there is recovery. In such cases there is always a stage of invasion, increase, acme, decrease, and resolution; or there are remissions, either daily or of some days, accounted for by the death of one crop of parasites, followed by a renewed access of disease when a new generation of germs is matured, and set free in the organism. In this way the remission and return of tertian or quotidian fevers and the daily hectic access of phthisis are accounted for. Chemical ferments would not act so, but would work through the whole system at once, and either kill the patient, or exhaust themselves by finding no more material to work on.

To prove this doctrine it is necessary that the presence of the parasite be constant in all materials which show themselves able to produce infection, that it can and does develop and reproduce itself in the organism of man, and that this parasitic being can alone, and isolated from every other matter contained in the infecting material, determine any given infection. To this we might add that each parasite should have distinct morphological characters; but it is well known that there is often a perfect likeness between germs, some of which are infective and some not.

The questions whether the microscopic organisms, of which we have been speaking, constitute a distinct species, or are capable of modification, and are even mutually convertible, and whether they are not found naturally in the tissues and fluids of healthy animals, have occupied some of the most acute observers of our time. Lister asserts that they are not found in healthy tissues. Bastian is of opinion that they may take their origin in unhealthy or dying processes by a method which he calls heterogenesis. Lewis has experimentally shown that by impairing the nutrition of any given organ bacteria may be made to appear, and Burdon Sanderson that they may be also made to appear in tissues of previously germless animals by exciting an intense inflammation within the peritoneum or beneath the skin by means of germless chemical agents.

Virchow, at the Medical Congress of 1881, taking the parasitic nature of certain diseases as proved, inquired whether there were not different forms of the same parasite giving rise to different affections or to modifications of the same disease, and spoke of the great interest attaching to the process of culture of germs, now well known. Büchner had by this method modified, and almost transformed, the germs of bacillus anthracis, and by a series of culture generations had developed a perfectly innocent plant, the hay

bacillus. Again, taking the hay bacillus, he thought he could give it virulent properties by a sort of "undomestication," making it wild again. Thus by giving the organism a special kind of soil and a more vegetable diet it might be made innocent; by a more nitrogenous diet, and under other circumstances it might be made wild or malignant again. Virchow, again, while he believes in the difference of the kind of germs entering the body, recognises strongly the resisting powers of the system, and the facilities given to the entrance of disease by weakness, which diminishes such resistance. Béchamp believes that germs of bacteria exist in all living and healthy animals, an opinion endorsed by Billroth. Some are of opinion (or were at the Congress) that there are no specific bacilli, as Forker, who considers that these organisms produce infection only in a secondary manner, their morphological form being indifferent. Hüter thought that there were specific modes of activity in micro-organisms, but a certain unity in all.

I must apologise for reciting these various opinions, but those I have quoted are all from personal experimenters on a large scale, and their recorded judgment is representative of the varied and fluctuating views of the thoughtful on the subject in all countries. By scrutinising their variety we shall at least learn that knowledge, while rapidly progressive, demands an impartiality of mind and a caution in decision, for the facts may not be borne out by the later experiments of to-morrow. As regards the germ theory in traumatic diseases many hold that normal blood and tissues contain micro-organisms, and that these are not causes of disease, but become so from an abnormal increase in their number, because the fluids have become so altered as to present conditions favourable to their development. To this it is replied that Burdon Sanderson and Koch himself did not find such in healthy blood, nor did bacteria spontaneously develop in man or animals. The latter author concludes that the frequent discovery of micro-organisms in traumatic infectious disease renders their parasitic origin probable, but thinks that we should have established for every such disease a parasite with marked morphological characters, while he is so persuaded of the ultimate truth of the proposition that he says: "May there not be the possible presence of a lifeless disease ferment never yet demonstrated, or other unknown quantities?" With these unknown quantities we have, however, but little to do at present.

Before examining the latest discoveries regarding tubercle let us shortly notice some of the other parasite diseases. The bacillus of typhoid finds its principal centre in the small intestines, but it can multiply itself outside the body and penetrate living organisms by means of air, water, milk, &c. However it may have been introduced, it is found in the lymphatics of the intestine and the mesenteric glands, passing thence by the bloodvessels into the whole organism. Transfusion of blood has carried the disease from one to another, as also has taken place in malarious fever according to Crudeli. These two diseases are not considered contagious, though secondary colonies of bacilli are found in the spleen, lymphatic glands, and spinal cord. Most curious and interesting is the discovery of the specific ferment of malaria attributed to Obermeier in 1873. According to Crudeli, who in Rome has had abundant opportunities of studying the subject, the parasite is a spirillus and appears as filaments. The bacillus is sporigenous, multiplies by spores inside its filaments, which break up and gain their exit either from their centre or from one extremity or both. They require a free exposure to the air and a temperature of 20° C. for their development. They are found in all marshes and in malarious districts not marshy, and in the superincumbent air of such districts. Not only spores, but developed bacilli, are found in the air. Cuboni found them in the sweat of his hands and face when in the Pontine marshes. These spirilli move briskly in the blood, are always found during an access of fever, diminish after the access, and entirely disappear in the period of apyrexia. This has been observed in man and in apes, and Carter inoculated apes with the blood of man in malarious fever, and with the result of producing the fever. Guttmann has seen the spirilli in the blood thirty hours after death, and Koch in the interior of organs. In 1879 Crudeli and Klebs appear to have satisfied themselves of these facts. In pernicious fever (the worst form of malarial fever, in which I have seen patients who fell down comatose while at work in the fields), these bacilli are most numerous in the blood and in the spleen, which is of a dark colour, almost black. They are also found in the brain. Experiments in 1880–81 in Rome prove their existence in the blood in the invasion or cold stage of the fever. A subcutaneous injection of these bacilli in rabbits and dogs produced tertian and quotidian fevers. They grew rapidly in favourable conditions, which seems to be moderate moisture, free exposure to oxygen, and a tolerably high temperature. The presence of putrid matters is hostile to their growth, so that soils which have never been manured are most favourable. It is a notable circumstance that quinine placed in the soil even in small proportions kills them. During the access of fever these bacilli get liberated into the blood and lymphatics, and the periodicity of these marsh fevers is said to be due to successive generations of parasites being sent into the blood. I would only further notice that in influenza and hay fever bacilli have been found in the nasal fossæ and frontal sinuses, a fact which led Helmholtz to treat coryza by injection of quinine. In acute rheumatic fever micrococci have been observed by Crudeli and others in the articulations and in the mitral valve. In acute pneumonia the presence of parasitic germs has been demonstrated. In syphilis germs of micrococci are held to be the essence of the disease, being found in the blood of infected persons, and in the lymphatics. Gummata are new colonies—slow of formation; and it is noticed that maladies beginning with mild symptoms find the system prepared to resist them. Inflammatory reactions in chronic infections retard their course by retaining the infective matter in their various centres, but these are in their turn preventers of the action of remedies which cannot reach the part.

ON ENDEMIC HÆMOPTYSIS.[1]

BY DR. MANSON,
OF AMOY, CHINA.

THE work of Bilharz, Griesinger, Cobbold, Dr. J. Harley, Sonsino, and others, has made us familiar with the parasitic affection of the urinary organs known as endemic hæmaturia. I propose to notice a disease of the lungs almost the exact counterpart of this of the urinary organs, and, following the example in the nomenclature of endemic hæmaturia, I will call this new disease "endemic hæmoptysis."

The parallel that obtains between these two diseases is very remarkable. Endemic hæmaturia and endemic hæmoptysis are both of them caused by parasites; in both diseases the parasite is a species of distom. Both affections are characterised by an intermitting or remitting discharge of blood, and in each the ova of the parasites are to be found in this discharge. Both have a limited and probably well-defined geographical distribution, and both tend perhaps to shorten life either by profuse hæmorrhage or the gradual sapping of health consequent on long-continued and frequently repeated small bleedings.

My acquaintance with endemic hæmoptysis dates from the middle of April, 1880. At that time I was practising in Amoy. For a purpose altogether unconnected with the subject of these remarks, I had for some time been in the habit of examining with the microscope the blood brought up from the lungs in all the cases of hæmoptysis I met with in native practice. On one occasion I was consulted by a Chinaman about a trifling skin disease. Whilst he was describing to me his symptoms he was seized with a fit of coughing, and brought up a small quantity of blood-tinged sputum. I transferred a small portion of the sputum to a glass slide and examined it with the microscope. I found plenty of blood and mucous corpuscles, epithelium, and so forth, and in addition to these I observed certain large bodies such as I had never met with before, and which I suspected, from their appearance, were the ova of a parasite. These bodies were in great abundance, some three or four of them in nearly every field. They were oval, dark reddish-brown, double outlined, operculated at the broader end, and contained one or more paler spheres suspended in a granular matrix. There was some diversity both in size and shape. Some were more spherical; others, again, more elongated. On an average they measured $\frac{1}{150}$ in. by $\frac{1}{300}$ in. These bodies were undoubtedly ova; but, thinking they might have been accidentally introduced into the man's mouth in his food, or possibly that there might be a parent worm about his mouth or throat, I examined his oral cavity very carefully. I found no trace

[1] Read at the Medical Society of London, March 19th, 1883.

of food or parasite, and when, on requesting him to cough again and expectorate, I found that he produced a second pellet of bloody sputum containing similar ova, I concluded that a parasite must reside somewhere below the vocal cords, probably in the lungs, and that I had stumbled on a new disease.

The man told me he was a native of Foochow, was thirty-five years of age, and was a secretary in a mandarin's office. He had been in Amoy about a year only. When twenty-one years old he went to Formosa, where he resided, with the exception of two or three visits to the mainland, for nearly ten years. It was during his residence in Formosa that his blood-spitting commenced—about a year after his arrival on the island. On his first attack he spat from half an ounce to an ounce of blood for nineteen days in succession. He emaciated slightly, but had very little cough. About six months later hæmoptysis returned—less profuse than on the former attack, but, as on that occasion, the sputum at the outset was pure blood. This second attack lasted for a few days only, but ever since he suffered from periodical attacks of hæmoptysis of two or three days' duration, and coming on every second or third month. He never had very much cough, nor had the hæmoptysis ever been very profuse, the blood after the first mouthful or two always being mixed with mucus. Once during two years he had no attack whatever. His general health was satisfactory. A careful physical examination failed to detect anything amiss with heart or lungs that could account for the hæmoptysis. His family history was fairly good; his mother, he said, died of some disease of which cough was a symptom, but his father had never any sign of chest disease, and his four brothers and sisters were alive and well.

Two days after the first visit this man called on me again, and, as on the first occasion, brought up by coughing abundance of ova-laden sputum. Although he promised to see me again he did not return, and for a time my attempts to investigate a new and interesting disease were baulked.

This man's case brought to my recollection that of a Portuguese, who had been my patient, suffering from aortic aneurism during November and December, 1878. This man, like my Chinese patient, had long resided in Formosa; indeed, he was only a visitor to Amoy when he came under my notice. He had been in bad health for some time, and a cold he caught so aggravated the dyspnœa he habitually suffered from that he was obliged to come to hospital. Under iodide of potassium and rest his urgent symptoms subsided, and he got well enough to return to Formosa about the end of the year. In the following June he died from rupture of the aneurism into the pericardium. Dr. Ringer, under whose care he had come, knowing I took an interest in the case, kindly sent me particulars of the post-mortem examination, and mentioned in his letter that on making a section of the lungs he encountered a parasite of some sort lying on the surface of his incision. Impressed with the great probability that a parasite of the same species that Dr. Ringer found in the lung of the Portuguese resided in the lungs of the Chinaman, and was the parent of the ova I found in such abundance in the sputa, I wrote to Dr. Ringer requesting him to send me the parasite, and in the sediment of the little bottle, in which it lay in spirits of wine, I had no difficulty in finding many ova corresponding exactly in size, shape, colour, and contents with those I had found in the Chinaman's sputa. This parasite from the lungs of the Portuguese was of the same species as that producing the ova in my Chinese patient.

As far as I know this is the only specimen of this parasite that has been found; it is a distom. The spirit specimen, which had probably shrunk somewhat from its original size, measured half an inch in length by one-sixth of an inch in breadth by about one-third of an inch in thickness. It was quadrangular in shape, with the angles rounded off, of a bluish-grey colour, and leathery consistence. I sent it to Dr. Cobbold, who pronounced it to be a new species, and named it, after the discoverer, Distoma Ringeri.

The gist of these observations was published in the China Customs Medical Reports for the half year ended Sept. 30th, 1880. In THE LANCET of Oct. 2nd of the same year I read an abstract of a paper by Professor Baelz, of Tokio, Japan, which appeared to me to refer to the same subject. He described certain bodies found in the sputa of cases of hæmoptysis occurring in Japan. He considered these bodies to be a stage in the development of gregarinæ, and proposed to call the disease they were found in Gregarinosis pulmonum. I wrote the professor for specimens, and he very kindly sent me a small bottle from Japan containing characteristic sputum. Under the microscope I recognised the bodies he described, but they were in every respect identical with the ova associated with the solitary specimen of Distoma Ringeri I had examined, and with the bodies I found in such abundance in the sputa of my Chinese patient. I persisted in the examination of the sputa in every case of hæmoptysis turning up at the native hospital in Amoy. I examined over a hundred cases, but did not again encounter the ova in a single instance. My patients were all natives of Amoy or of the surrounding country. I suspected therefore that, like other distoms, the area of distribution of Distoma Ringeri was limited to certain districts, and that Amoy was not one of these. But I knew the parasite was to be found in Formosa. I therefore turned my attention to the natives of that island. On application to a friend residing in Formosa, I received two large bottles filled with sputa from two of his servants, which on examination were found to be crowded with distoma ova. In answer to a second appeal my friend sent his servants to Amoy to be under my immediate observation. The elder of these two men was a short, sturdily-built fellow thirty-one years of age. Until his visit to Amoy he had never been out of Formosa. His family, he said, was healthy. His father died of dropsy, aged fifty-eight, but his mother, three brothers, and four sisters were alive and well. His blood-spitting began about eleven years before I saw him. He was then working on the tea hills as an ordinary labourer. He observed that when he breathed hard during severe exertion cough came on, and with the cough expectoration of blood-tinged mucus. From that time he has been troubled with blood-spitting more or less constantly. It was always increased by violent exercise, and on one occasion, whilst rowing in a boat, he suddenly brought up over a bowlful of pure blood. Occasionally coughing and spitting would stop for a few days, perhaps for a month, but then they would return and occur daily for a month or two. I auscultated this man's chest very carefully, but failed to detect any physical sign of disease. His throat was remarkably well developed, and altogether, though rather thin, he seemed to be in robust health.

The other servant was a tall, thin, rather delicate-looking young man, twenty-two years of age. Both his parents were dead: from what I could make out they died of some dropsical affection. He said he was quite strong till four years before the date of his visit to me; then, and without any obvious cause, he began to cough and spit blood, especially after exertion. During one year he continued to spit blood almost daily; about an ounce at a time. He then changed his employment to one in which less physical exertion was required. His hæmoptysis ceased and did not recur; but the cough continued, and now, almost daily, especially on rising in the morning, he has attacks of coughing ending in the expectoration of quantities of yellow-brown muddy-looking tenacious mucus. He complained of some pain about the left nipple, but on auscultating him I failed to detect anything amiss with the lungs.

While these two men lived in my house I examined their sputa daily. By getting them to cough I could always procure abundance of ova-laden sputum. So numerous were these ova, that I could procure thousands of them any time I chose to send for my patients. The fit of coughing which occurred on rising in the morning was always the most productive.

These men told me that blood-spitting was a disease to which Formosans and immigrants to the island were especially liable. In some districts it was very prevalent. I had only to request my friends there to send me some, and usually by return steamer I received three or four specimens coming from different blood-spitters.

The constant or repeated small bleedings these parasites induce cannot fail in certain cases to produce in time a state of intense anæmia, rendering the subjects of it very liable to attacks of dangerous forms of other disease. But the Distoma Ringeri, in consequence of the position it occupies, the lungs, and the liability of these organs to great strains and congestion on exertion or coughing, undoubtedly exposes its host to the additional danger of sudden and profuse hæmorrhage and the consequences, whatever these may be, of infarction of the lung tissue by effused or suddenly inspired blood. I am not in a position to assign to this parasite its exact share among the causes of grave disease, but I have no doubt that in time it will be found to operate pre-

judicially on the populations of the countries in which it is endemic in the directions I have indicated.

I need not enlarge on the symptoms and diagnosis of endemic hæmoptysis, but there is a point having very practical bearings—viz., the way in which the parasite and the disease it induces spread from one human host to another. By observing the specimens of ova under the microscope, it will be seen that they contain no trace of embryo. The ova passed in cases of endemic hæmaturia are occupied by a well-developed ciliated embryo, which escapes very soon from the shell.

The ova of other well-known distoms also develop a ciliated embryo. The development of the embryo of Distoma Ringeri was therefore the first point I had to attain before an intelligent idea could be got as to how the parasite spreads. My two patients supplied me with abundance of material for experiment.

It is evident that the sputum is the natural medium for the escape of the ova from the human host—just as in the case of Bilharzia the urine is—or, in the case of the intestinal and liver parasites, the intestinal discharges are. By following the destinies of sputum, therefore, I would perhaps be led to some knowledge of the development of the ova it contained. Seeing that the embryo was not at all developed, it was unlikely that the egg was immediately transferred to the body of the final, or, perhaps, of an intermediary host. As in other distoms, it was probable that there was a preliminary and ciliated stage in which the miniature parasite was free. When sputum is cast on the ground its destinies may be various. That which seemed to me the most conducive to the development of any ova it might contain was that it should be transferred by some agency, such as a shower of rain, to some pond, ditch, or well, where it might be incubated. I resolved to experiment in this direction. I placed specimens of distoma sputum in glasses, shook it up with filtered water, washed it daily for a week in fresh water, and then allowed the ova to settle quietly to the bottom of the vessel. In this way I fancied I imitated what must happen in nature. From day to day I examined ova thus treated with the microscope, and had the satisfaction of finding that a process of development led up to the formation of an embryo. At the end of from four to six weeks nearly every ovum contained active ciliated embryos closely resembling in appearance and habits those of Bilharzia and other distoms. Ova of the same age which I had not thus treated with water, but which had been kept in sputum as originally expectorated for comparison, exhibited no signs of development, and resembled in every respect freshly procured specimens.

When ova thus treated approach maturity, they present a very striking and interesting appearance. The embryo they contain is a delicate heart-shaped ciliated organism endowed with prodigious activity, incessantly occupied in attempts to rupture a collar-like membrane which surrounds its anterior extremity, and to force open the operculum of its shell. In time it accomplishes this, and by continued efforts, which can best be described as frantic, it squeezes its plastic body through the opening. Freedom obtained, it rushes through the water with great velocity, assuming varying forms. The cilia are in constant motion, and the whole appearance and behaviour of the restless little animal convey the idea that it is searching for something. This something, I have little doubt, is its intermediary host. Its correspondence with the embryos of other and better-known distoms justifies the inference that its future history will bear a similar resemblance, and that the various stages of advancing development require its entrance into the body of some animal which will act the part of intermediary host. Now the necessity for the intervention of this intermediary host impresses on this parasite and the disease it produces their endemic character. Speaking roughly, parasitic diseases depending on parasites which do not require an intermediary host are pandemic. Again, if parasitic disease, whose parasite requires an intermediary host, does not occur in certain old countries, like China, we have a *primâ facie* argument for believing that the intermediary host is not to be found there. From this I infer that the particular animal which acts the part of intermediary host to Distoma Ringeri is not to be found in China, but that it is a native of Formosa and Japan. Again, from the fact that the first step in development of the embryo takes place in fresh water, I infer that this intermediary host is a fresh-water animal. Therefore the intermediary host of Distoma Ringeri must be searched for among the fresh-water animals common to Formosa and Japan, which are not natives of the neighbouring mainland of China.

A glance at the map of Asia will show that Formosa and the great islands constituting the empire of Japan are by no means contiguous, whereas a very narrow belt of sea separates Formosa from the mainland of China. The distribution, therefore, of the intermediary host of Distoma Ringeri must depend on something other than mere latitude or temperature. There must be something in the soil or climate which Formosa and Japan have in common, and which is necessary to the well-being of the intermediary host, which China does not afford. I believe this element depends in some way on a volcanic soil. Unlike the mainland of China, both Formosa and Japan are actively volcanic. On this account, I believe, as research and our knowledge of this parasite extend, it will be found to prevail in other countries where a volcanic soil and certain ranges of temperature and moisture allow of the existence of the intermediary host. I have little doubt it exists in the Philippines and neighbouring islands.

To return to my patients. The idea of curing them naturally occurred to me, and I made many attempts to dislodge their parasites. The accessibility of the bronchial tubes and tissues of the lungs generally to medicated vapours suggested inhalations of a parasiticide character. With a steam spray I atomised solutions and infusions of various substances, and caused my patients to inhale them. In this way quassia, kousso, santonin, turpentine, and sulphurous acid were applied to the lungs, inhalations being practised daily for a week in one case, and a fortnight in the other. But no mature parasite was brought up, only ova in abundance. However, three months after these inhalations the younger of my patients told me he was quite well; he had lost his cough, and no longer brought up rusty mucus. I irritated his lungs with fumes of burning sulphur, and thus caused him to cough violently, but the small quantity of bronchial mucus he brought up was quite destitute of ova. I believe he was cured. My other patient, I subsequently learned, was not benefited. Of course, the result of inhalations will depend in some measure on the position the parasite occupies in the lungs; if it is free in a bronchus we need not despair of dislodging it, but if it lies in the blood-vessels this may not prove so easy a matter.

From the facts I have adduced it is evident in what direction attempts at prevention should be made. It is only necessary to boil or filter drinking water, and never to eat uncooked vegetables or other uncooked food, to ensure immunity from endemic hæmoptysis in the countries where it prevails. London is a very cosmopolitan place, I doubt not, in the matter of disease, as in many other things, and just as we see natives of Japan and other countries in the streets, and meet Englishmen who have travelled or resided in foreign countries, so it is very likely you will meet in your hospitals or consulting rooms exotic imported diseases. I would recommend, therefore, in the event of your being consulted for chronic recurring hæmoptysis by a patient who has resided or travelled abroad, and in whose chest you can find no adequate reason for the blood-spitting, that you should place a little of his bloody or rusty sputum under the microscope.

NOTE ON A PHASE OF INTOXICATION.

BY WILLIAM S. SAVORY,
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IN all that has been written on the subject of intoxication, one phase, and that perhaps the most common, of poisoning by alcohol has almost escaped description. Fits of drunkenness, in its various degrees, after a debauch on the one hand, and disease, for the most part in the form of degeneration of some kind from prolonged excess on the other, are of course only too familiar among its effects. Much also has been said of the general depression and disturbance of function which usually precede the establishment of organic disease; of the loss of appetite and craving for stimulants, and even the need of them for immediate and temporary exertion of any kind. But I allude now to none of these. I refer to a state often antecedent to the one last mentioned, of what I would call habitual narcosis—a state due not to a com-

paratively large excess of alcohol at any one time, but to the daily, almost hourly, imbibition of beer or spirits. Alcohol in some form is taken, not at any one moment in very large quantity, but at intervals so frequent as to keep up its effect in a powerful degree continuously through the twenty-four hours. This habit pervades all classes of society, but it prevails most largely, or at all events it is most openly illustrated, among the lower. I believe that it may be seen most commonly in the carmen who drive slow and heavy waggons through the streets of London. These men hardly ever seem to be thoroughly awake. They sit for the most part bent forward, with a dull drowsy countenance, the eyes either half or wholly closed, and the limbs and body shaking with the vehicle from sheer relaxation of the muscles. If the horses which lead them were not more intelligent, none would dare to venture within their range. This condition is not due to mere fatigue or weariness. The swollen features, the congested surface, the bloodshot eyes, tell another tale. Moreover, when aroused from this stolid state, the behaviour is characteristic enough. When suddenly surprised they speak or turn round, but not as one overtired and half asleep, or even naturally very stupid, but only after a prolonged interval, with slow and lethargic action, like the movement of a sloth or tortoise. Perhaps, in civilised life there is no state of human nature lower than this. Here the blood is constantly charged with alcohol, and the brain and other nerve centres are always largely under its influence.

But inevitable as the result is here, when nothing stronger than their own will intervenes to interrupt its course, if from these men alcohol be forcibly withheld for a time, before the stage of serious organic mischief has been reached, they are usually restored very rapidly, and often become changed in a startling way. When such men are brought with some injury into a hospital they are likely to pass through an attack of delirium tremens, from which, however, they usually recover, and the approach of this is made manifest by want of sleep, general depression, and tremulousness. But most of them, if the injury be not severe, after passing a few days in a heavy drowsy state, craving for beer or gin, rapidly grow brighter and fresher, become more alive, and before long are so changed for the better in every way that it must be difficult, I should think, for the patient to believe in his personal identity.

Something is to be learnt from these cases. Formerly it was assumed to be highly dangerous to suddenly deprive a man, who had been accustomed to excess of them, altogether of stimulants. I would not venture to say that this can invariably be done with impunity, but I have no hesitation in saying that as a rule the practice is safe and satisfactory. And in the very exceptional instances when danger threatens, it can, I think, be usually foreseen. If a man can sleep and eat tolerably well, his life does not hang on stimulants. Nay, even in delirium tremens, looking to these signs, we may with the best effect often withhold them. I suppose it is well understood now that it is not good practice to prescribe stimulants in delirium tremens as a matter of mere routine. When such patients as these come under our care I would always, when practicable, give them time for recovery from the effects of this bad habit before subjecting them to any operation, or even to measures of severe restraint. The time is well spent in leaving such a patient alone for some days to the influence of suitable food and the rigid exclusion of alcohol in any form, and in standing by and watching the change in the furred tongue and foul breath and obtuse intellect, until at length he may truly say of a demon more potent for evil than that which assailed Macbeth—

> Why, so: being gone,
> I am a man again.

ENLARGEMENT OF THE SHEFFIELD INFIRMARY.—For some years past the inadequacy of the accommodation for out-patients, casualties, &c., in the Sheffield Infirmary has been much felt, both by the medical staff and the weekly board; and, as the result of long deliberation, it has been decided to build a large waiting hall for out-patients and casualties, with consulting rooms and other conveniences. A special meeting of the weekly board was held on the 2nd instant, to consider the various plans for the proposed enlargement which had been sent in by several local firms. It was agreed to accept those prepared by Mr. J. D. Webster, the entire cost of which is estimated at from £4000 to £5000.

DIFFUSE CEREBRAL HÆMORRHAGE IN A NEW-BORN CHILD AFTER AN EASY LABOUR;

COMMENCEMENT OF SYMPTOMS ON FOURTH DAY; DEATH ON FIFTH DAY; AUTOPSY.

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MRS. C——, aged about twenty-five, at her second confinement (her first labour having been normal and the child alive and healthy) was delivered easily and naturally on Sept. 8th, 1881, at midday. On the night of the 10th the child was restless. On the 12th, at 9 A.M., it was found in its cot with its hands clenched. At 10 A.M. the child had a convulsion. At 2 P.M. it squinted and became livid, and this squinting and lividity recurred about every twenty minutes. At 10 P.M. there was a strong convulsion, repeated about every hour till 1 A.M. on the 13th. At 11.30 P.M. on the 12th left ptosis supervened, which rapidly increased. From 1.30 A.M. to 4 A.M on the 13th the convulsions were almost incessant on both sides, but affected the left side most. Death took place at 4 A.M.

The necropsy was made by Mr. J. Kingston Barton (to whom I am also indebted for some of the above facts) under very unfavourable conditions, which, added to the ordinary great difficulty of examining the brain of a newly born infant, made a more precise examination impossible. Child female; length twenty inches; apparently mature. Heart: foramen ovale closed, except a very small aperture at the upper border; mitral and tricuspid valves showed "hæmatonodules" described by Parrot, corresponding to his description. Brain: diffuse apoplexy, especially of the left side, the blood having escaped apparently from the neighbourhood of the lateral ventricles and reaching the surface in parts; on the convex surface there were many small hæmorrhages.

The hæmato-nodules are thus described by Parrot:[1] "The hæmatomata are little tumours, of spheroidal or conical form, black or dark violet, like concretions of blood or morsels of coal, varying in size from the smallest size visible to the naked eye to that of a millet seed; isolated or united so as to form little clusters. They are only found on the mitral and tricuspid valves. ..... They are smooth and glistening, and appear always covered by the superficial layers of the endocardium. ..... After a time they become decolourised, sink, and little papilliform eminences alone are found.[2] ..... They are seen in children immediately after birth and during the first month, but are not seen in stillborn children. After the first month they rapidly decrease. ..... They are to be considered as the result of the changes in the circulation at birth.[3] ..... They contain blood, of which the hæmatin is in various degrees of change.[4] ..... They do not resemble the products of acute endocarditis. Their surface is always smooth; they are never soft or friable, and can never be detached except by tearing. ..... They never show arborescent vessels; they are not to be regarded as pathological, but as, at most, demi-lesions." I have given this description as exactly describing the appearances in my case. In 120 children under seven years of age Parrot found them in seventy-four. In all of these (thirty) not more than a fortnight old, they were never absent. I may add that I have found them in all the children dying soon after birth, but not in any full-time stillborn fœtuses in whom I have looked for them. I do not imagine that they had anything to do with the cerebral hæmorrhage.

The case seems worthy of record on account of the rarity of cases of cerebral hæmorrhage in young children; the rarity with which they are recorded may be partly due to the fact of their falling somewhat between the departments of the obstetric and the general physician. It may be scarcely necessary to remind the student of such cases that the term "apoplexy" applied to young children is generally used to describe the first or livid stage of asphyxia. Such "apoplexy" may be associated with true cerebral hæmorrhage.[5] Rilliet and Barthez[6] say nothing about cerebral

[1] Arch. de Physiologie, 1874, p. 538.
[2] Page 540. [3] Page 539. [4] Page 544.
[5] Désormeaux in Dict. de Méd. Paris, Déchet, 1826, tome xv., p. 153.
[6] Maladies des Enfants, 1853, tome ii., p. 277.

hæmorrhage in the newly-born; the youngest in their table is two years old. Gerhardt,[7] in dealing with the subject, of cerebral hæmorrhage in children, mentions its rarity, but calls attention to the fact that the earlier the age the commoner is the occurrence. Four out of twelve cases related by Gerhardt occurred within the first six weeks. Billard found an apoplexy in the left corpus striatum in a child three days old. Berard found a similar one in a child eight months old. It is commoner in males. Rilliet and Barthez give a table in which nine out of fifteen were males. Bednar found eleven out of sixteen in males. It is generally preceded by disease, and may be associated with miliary aneurisms. Inter-meningeal (as opposed to intra-cerebral) hæmorrhages are not rare after difficult labours, and are due to contusion. Capillary "ectasies" are congenital; miliary aneurisms always arise after birth; injuries after birth are usually inter-meningeal. In my case the small cortical hæmorrhages may have been the result of the convulsions.

Great Cumberland-place, W.

FIVE SUCCESSFUL CASES OF TRACHEOTOMY FOR CROUP;

WITH REMARKS ON THE CONSTRUCTION OF THE TUBES AND THE DIFFICULTIES IN THEIR FINAL REMOVAL.

BY JAMES L. LITTLE, M.D.,

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BUT little attention has been called to the dangers and difficulties of permanently removing tracheotomy tubes after tracheotomy and the re-establishment of the natural respiration. My remarks in this paper will be confined entirely to cases where this operation was performed on patients suffering from croup. During a period of twenty years, though performing it a great number of times, I had but one successful case until the fall of 1879, when it was my good fortune to have four consecutive cases which were successful.

CASE 1.—In this case the operation was performed for diphtheritic croup, and the tube was removed on the sixth day without any unpleasant symptoms.

CASE 2.—In September, 1879, I performed the operation on a boy four years of age, the ordinary fenestrated silver tracheotomy tube being used. Three weeks after, the child being in an apparently good condition, it was thought advisable to remove the tube; the inner one was removed, and the opening of the outer was corked up for fourteen consecutive hours. During this time the patient breathed through the mouth without the slightest difficulty. Dr. Frank Anderson, United States Navy, who had the case in charge, then removed the tube and for two hours and a half no trouble whatever occurred, but at the end of that time the respiration became suddenly obstructed, and in about one minute was completely arrested. Dr. Anderson was fortunately at the door of the room when this happened, but before the tube could be found, it having been mislaid, the child was unconscious. He quickly reintroduced the tube, using some force, as the opening had already contracted, and with the aid of artificial respiration and inflation of the lungs through the tube, the respiration became re-established. Bloody and frothy expectoration took place through the tube during the remainder of the day. On the following day I removed the tube and carefully examined the wound with the aid of the head mirror. Around the external margin a considerable number of exuberant granulations could be seen. The tracheal margin of the wound was inspected with difficulty, as there was considerable thickening of the soft parts over the trachea. A number of whitish granulations could be seen apparently connected with the upper margin of the tracheal wound. Several attempts to seize them with a slender pair of forceps failed. An attempt was then made to apply subsulphate of iron, Monsel's solution, by means of a feather, as recommended by Jacobi, to these granulations. The tube was kept out for about four minutes, when the child becoming somewhat embarrassed in his respiration, it was replaced. The tube was removed every third day by Dr. F. Anderson, and an attempt made to touch the granulations with Monsel's solution. Symptoms of asphyxia would always occur in a few minutes after the removal of the tube. On November 1st, the tube being taken out by Dr. Anderson in order to make an application of the iron, the breathing again suddenly became arrested and the child became cyanotic before it could be reintroduced. From this time the outer tube was allowed to remain for several weeks without being disturbed. The mucus which was expelled from the opening was almost always stained with blood. On careful and repeated examinations it was found that the fenestra of the tube did not completely enter into the trachea; when the inner tube was removed, reddish granulations could be seen in the track of the wound, protruding into the dorsal opening. For this reason it was thought advisable to try a non-fenestrated cannula, and one was procured, having the lower end beveled from before downwards and backwards, so that the sharp extremity should not impinge against the anterior wall of the trachea. From the time of the introduction of this tube the condition of the wound rapidly improved. The external granulations seemed to dry up, and at the same time the child began to breathe through his mouth, while the mucus discharged from the tube was no longer stained with blood. Four months after this operation, I found the child much improved in general health. He could breathe freely through his mouth, was able to talk in a loud and clear voice, could blow and whistle, the air passing upwards alongside the tube. The edges of the external wound were entirely healed, and the thickening of the soft parts had disappeared. In order to make sure of the child's ability to breathe without the aid of the tube, I closed its opening with a cork, and allowed it to remain about half an hour; during this time the child breathed freely through the mouth. I then determined to remove the tube and watch the result. In order to be ready for any emergency that might arise, I laid out my instruments, and arranged to remain in the room with the child until morning. The tube was then removed, and the wound left uncovered, air passing freely in and out during respiration. The child soon fell asleep in the nurse's arms, and was placed in his bed. Two hours after air ceased to pass through the wound, and it had contracted to a very small opening. The child passed a good night, not waking till morning, his respiration being free and noiseless. From that time no difficulty has occurred.

CASE 3.—On April 8th, 1880, I was called to perform tracheotomy on a patient of Dr. Stronach's of New York, the case being one of diphtheritic croup in a girl three years and four months of age. I used a non-fenestrated tube of five millimetres in diameter. The child made a rapid recovery; granulations occurred around the margin of the external wound, and, on being treated with occasional applications of nitrate of silver, rapidly disappeared. At the end of five weeks the edges around the external wound had entirely healed; the child breathed naturally through the mouth and her articulation was almost perfect. I removed the tube and the wound closed rapidly, so that at the end of an hour no air could be detected passing through it.

CASE 4.—On May 7th, 1880, I was called to see a patient of Dr. Griswold's, a girl about four years of age, who had suffered from symptoms of membranous croup for three days. The child was cyanotic and tracheotomy was performed at once. The recovery was rapid and without any unusual symptoms. No membrane was expelled from the tube. Two weeks after the child could not breathe freely through the mouth with the tube closed, and therefore it was allowed to remain *in situ*. In April, 1881, eleven months after the operation, I found that the tube was still in position. The child breathed freely through the mouth, and her voice was loud and clear. I removed the tube, and in two hours no air could be felt coming through the wound.

CASE 5.—In January, 1881, I was called to see a patient of Dr. Cypert's, a girl four and a half years of age, suffering from membranous croup. In this case pieces of the membrane had been expelled from the trachea. The dyspnœa was very severe, and immediate operation was necessary. On the eleventh day after the operation, upon removing the tube for the purpose of cleansing, I found difficulty in replacing it; it was therefore left out and no untoward symptoms occurred. For two or three days before the removal of the tube, the child was able to articulate loudly. Great improvement took place in this respect, however, after the removal of the tube.

In the first case the obstacle to the re-establishment of the natural respiration was due to the presence of granulations

[7] Handbuch der Kinderkrankheiten, 1880, tome v., p. 323.

around the edge of the tracheal wound, which evidently were held down while the tube was in position. Upon the removal of the tube they formed an obstruction to the passage of air through the larynx as soon as the tracheal wound contracted. Dr. Jacobi, in a paper on "The Pathology and Treatment of Group," published in the *American Journal of Obstetrics*, May, 1868, called attention to the same condition interfering with the removal of the tube in several patients upon whom he had operated for tracheotomy. Mr. Thomas Smith, in a paper on the "Obstacles to the re-establishment of Natural Respiration after Performance of Tracheotomy," published in the Medico-Chirurgical Transactions, vol. xlviii., also relates several cases in which the presence of these granulations prevented the removal of the tube. In Dr. Jacobi's cases, and in my own, a fenestrated tube was used, and I infer from the description given by Mr. Smith that these tubes were used in his cases. In my second case, where a closed cannula was used, and allowed to remain in four weeks, no granulations were seen, though carefully looked for. In my third case, where the tube remained in eleven months, a non-fenestrated tube was also used, and there would probably have been no difficulty in its removal, after a few weeks, if other troubles had not intervened. These cases seem to prove that the fenestra which is found in nearly all the tracheotomy tubes made by American instrument makers, and which is for the purpose of testing the ability of the patient to breathe through the larynx when the tube is closed, is not only useless but injurious, probably causing by its irritation the growth of these granulations. Dr. Lewis A. Sayre reported a case before the Medical Society of the State of New York, in 1864, in which fatal hæmorrhage took place, on the seventh day, after the operation in consequence of a slough through a large vein in the neighbourhood of the wound, caused by the pressure of the edges of the fenestra of the tube. In the paper already referred to by Mr. Thomas Smith a letter from Trousseau is published, in which he says, "I advise you whenever you can to leave a closed cannula in the trachea until the child has breathed for ten days in a natural manner. The cannula, with a dorsal opening, is a useless and often dangerous instrument, for, if you compare the calibre of the cannula with that of the trachea, you will see that the section of the trachea is more than double the area of that of the cannula. The air, therefore, can pass freely between them. On the other hand, the tissues project through the dorsal opening of the cannula, and thereby the inflammation is kept up." In my second case, after the granulations had disappeared, the closed cannula was no hindrance to the child's breathing in a natural manner. His voice was as loud and distinct before the final removal of the tube as after; in fact, I could perceive no difference whatever. One other point in connexion with this case, which I did not refer to in the history, is this: the first tube which was used had an immovable collar. The non-fenestrated tube had the usual movable collar, which, allowing a considerable degree of motion, prevented a certain amount of irritation during swallowing, coughing, and other movements of the patient's neck. In regard to the size of the tube, Mr. Robert M. Parker, in a paper on Tracheotomy in Membranous Laryngitis, published in the Medico-Chirurgical Transactions, vol. lxii., advises the use of the largest tube that can be got into the trachea without actual violence, for the reasons that it will afford the patient a better supply of air, and also allow the tracheal secretions to be removed with greater facility, which feature in the after-treatment of these cases he considers of paramount importance. He also advises the movable collar and the beveling of the extremity of the tube, and recommends that the tube be as short as is consistent with safety; he finally proposes a cannula in which the curve resembles the Gothic rather than the Roman arch. If a tightly fitting tube such as he advises be used, it should of necessity have a fenestra, as the air could not pass between it and the walls of the trachea. In the other cases detailed, the advice given by Trousseau was strictly followed, and the tube was not removed until the voice was clear and the child could breathe freely through the mouth. I think the size of the tube should always be smaller than the calibre of the trachea. It should have a movable collar, and the lower extremity should be beveled from before downwards and backwards. I consider that the shorter the tube the better. In order to make these tubes as light as possible, I have had them manufactured for me by Mr. Tiemann, of New York, of aluminium. This does not tarnish nor corrode like silver. The shape of the tube is here represented. I have never used the Durham tube, which has the advantage of being shortened at will. The excellent tube recommended by Mr. Bryant has this same advantage, combined with a ball-and-socket movement, which imparts

mobility to the tube when in the trachea. This tube could be improved, I think, by being made of aluminium.

The conclusions that I would draw from these cases are—

1. That the tube used should be somewhat smaller than the calibre of the trachea, should have no dorsal opening, and should be made with a movable collar or ball-and-socket attachment.

2. No attempt should be made to remove the tube permanently until the patient is able to breathe freely for some days through the mouth with the tube closed.

3. That granulations around the margin of the tracheal wound will be less likely to occur if no source of irritation exist in connexion with the tube.

FOUR YEARS' TREATMENT OF INSANITY AT GARLAND'S ASYLUM, WITH REMARKS.

BY J. A. CAMPBELL, M.D., F.R.S.E.

(Concluded from p. 498.)

HAVING disposed of the general results and shown, so far as recovery, death, or asylum retention is concerned, the disposal of these four years' admissions (it seems to me unnecessary to deal with a small proportion, chiefly imbeciles, removed to workhouses or to friends), I shall now shortly discuss what was done in the way of treatment, dealing first with medicinal treatment.

Table of Summary of Treatment.

Years.	No. of admissions.	Treated by		
		Tonics.	Hypnotics.	Continuous sedatives.
1879	112	50	20	2
1880	129	47	11	4
1881	114	39	8	1
1882	140	53	3	2

The tonic and blood restorer that I have principally used has been iron and quinine, the tincture of the muriate in from five to ten minim doses, and quinine in one grain doses; in a few cases the citrate of iron and quinine was used, in several Easton's syrup, also tincture of the muriate and tincture of quassia, and in one or two instances a solution of strychnia and quinine. I have also used very freely malt extract and cod-liver oil in the treatment of these cases, though I do not include either in the above table. Malt extract has wonderful weight-producing effects, and is of use also in persistent refusal of food; it seems to assist digestion in unsalivated and unmasticated food. In a case that I fed for a long time with the tube during 1881 and 1882, while I gave malt extract with feeding, the patient gained in weight, when it stopped he lost. I also used stimulants freely in the recent cases wherever I thought them likely to be of use. Bitter beer (Bass), London stout (Barclay and Perkins), Islay whisky (Lagavulin distillery), were the forms used. I have already discussed the mode in which stimulants are made

use of in this asylum, so do not enter on the subject here.[1] The treatment by hypnotics here merely signifies that for usually a limited number of nights sleep was artificially produced, and in all but two cases chloral was the drug used; in two bromide of potassium, a very mild sedative, was given. In the nine cases that were treated by sedatives continuously during the day for some time, bromide of potassium was the agent used in all but one case, and in that case a mixture containing tincture of opium and tincture of hyoscyamus was used; this latter was a general paralytic. In a considerable number of cases, where syphilitic taint was known to exist or suspected, iodide of potassium was used in combination with tincture of cinchona; in several cases marked mental amelioration rapidly ensued.

It is unnecessary to say that the functional ailments of the female patients were specially treated, and also other general or local physical disease in patients of either sex. All the epileptics who were admitted were treated continuously with bromide of potassium; in fact, for many years all the epileptics in the asylum who would take medicine have been continuously on this treatment with good effect, and their state is regularly examined into at short intervals. I have used blisters to the head in five cases, and continuous counter-irritation by tincture of iodine in one case, though in none of these cases has recovery taken place, yet in two it may; they were all cases threatening to become totally demented. I should like to hear the experience of others as to blisters in such cases. I have used the morning cold shower bath freely and with good effect in a large number of cases during the summer months, but I have nothing to add to what I have already said[2] on the value of this as a curative agent in certain given forms of insanity. I may shortly state that during these four years I have found it unnecessary to use continuous sedative treatment, or sleep-producing draughts, to the same extent that I did during the previous five years. I believe this to be due to the greater attention devoted to the recent cases, the more extended open-air treatment in force, and the greater absence of asylum-made excitement which now exists here. Nothing can be more prejudicial to new patients than to be herded among an unruly lot of noisy chronic lunatics, and I am also of opinion that the plan of having very large wards to contain over fifty and up to a hundred patients is inimical to proper care, comfort, and safety for the patient as well as detrimental to cure. Attendants in a very large ward so subdivide care, responsibility, and attention, that when anything happens it is quite impossible to find who is to blame, and when it is the work of many little real interest or attention is paid to any one patient. Better results are certainly arrived at by subdivision of both patients and attendants.

Attendance.—Hitherto too much has been expected from asylum attendants; most asylums have too few attendants for really proper curative treatment. Each new patient should, if at all excitable, have a special attendant for some time after admission. The increase in night attendants which has taken place in English asylums, owing to the repeated suggestions of the Commissioners in Lunacy, is a much-needed step in the right direction. The residuum of the last ten years' admissions into this asylum is a much more easily dealt with, more orderly, cleaner, and less noisy lot, than the older residua, and this I believe is entirely owing to the greater care and attention both by day and night that was expended on them, especially during the first portion of their residence here.

Out-door exercise.—I dealt at length in my former paper with this subject. I need only say that weather, and the patients' state allowing of it, I have kept all the excited patients out all day with excellent results; the excitement quickly subsides in most cases, the general health improves, and natural sleep becomes re-established; but while this treatment is most useful in the majority of excited cases, there are some in which it may do harm.

Rest in bed.—In going over some asylums, I have heard it pointed out as a thing to be proud of how few cases there were in bed. This is a wrong state of matters if bed would have been the best place for some of the patients. There are certain cases that, instead of being walked out, really require rest in bed and constant and careful feeding to quiet them — the excitement, the result of nervous exhaustion in aged and weak individuals. In many cases of epilepsy in excitable patients, if the patient were put to bed before coming out of a fit and left quiet, an attack of excitement would be warded off.

Seclusion and restraint.—I find that I have used seclusion in cases of violent paroxysms of excitement, when I feared injury to or from the patient, to the following extent (this excludes cases of epilepsy and epileptical excitement): in 1879, ten individuals on eleven occasions; in 1880, six individuals on seven occasions; and in 1882, nine individuals on nine occasions. This record applies in this particular to the whole asylum population, averaging 450, not alone to the admissions during the four years. I am quite aware that in some asylum reports much is made of seclusion never being used; but if the patients are like those who come under my observation, I am very sure that in certain cases it is the safe, the humane, and the proper treatment. I have used restraint in all surgical cases where absolute rest was required. I do not think that the healing of a wound or broken bone should be delayed or imperilled because at one time restraint was abused.

What is the value of a recovery? Irrespective of the gain to the individual of his sanity and also of the amount which his labour may bring him during his future life, the relief to the union of his settlement in this county, at the present asylum rate of 9*s.* 7½*d.* a week, with the death-rate for twenty-one years averaging 7·7 per cent., means thirteen years' cost, or £325, if he keeps out for life. I have always thought this aspect of a recovery was not brought into proper prominence: outlay in sufficient medical attendance is more profitable than in stone and lime for additions, or in additional officers for the purposes of management.

Are the recoveries real? Who can say till their life history is finished? It would be as wrong to detain in an asylum after a reasonable probation a person who as far as can be judged appears sane, as to keep in a hospital a patient recovered from pneumonia for fear exposure should bring on another attack. In some cases I am sure rapid discharge is the proper course for the patient's sake, in others a lengthened period of probation. To form any opinion as regards the real value of discharges in a short period would be fallacious, but the results of ten years' admissions, discharges, readmissions, and deaths will allow of discussion. In the ten years ending 1882, 1182 patients were admitted; 268 were readmissions, the recovery rate was 47·3, the average death-rate 8·1, and the increase by retention was 121. The 560 patients who recovered consisted of 508 individuals; 52 appeared more than once—viz., 1 five times, 2 four times, 10 three times, and 39 twice; 138 of those recovered were resident under three months. Of this number 28 have so far been readmitted, but 4 only within the year of discharge.

My experience convinces me that, given the same character of admissions, the more individual medical care, attention, consideration, and judicious curative treatment an insane patient receives, the greater will be his chance of recovery, the higher will be the asylum recovery rate. We must in this branch of medicine plod along like the rest of our medical brethren, adding by persistent observation to our knowledge, though it may be very slowly and little by little.

I am glad to say that in this asylum the percentage of recoveries has so far not lessened, as shown by the concluding table:—

Table showing General Results of Three Periods comprising Fourteen Years.

Period of	Total admissions.	Percentage of	
		Epileptics, imbeciles, and general paralytics.	Recoveries.
Five years ending 1872	572	15·7	44·0
,, ,, ,, 1878	576	13·9	48·0
Four ,, ,, 1882	495	10·9	47·4

In the last period ten chronic patients who had been boarded in another asylum owing to overcrowding here were brought back; they count in the admissions, and reduce the recovery rate, which is calculated on the admissions. Were it not for this the recovery rate would stand at 48·4, the highest of the three periods given.

[1] Note on the absence of beer in an Asylum dietary, THE LANCET, May 14th, 1881.

[2] The Shower Bath in Insanity, Journal of Mental Science, Jan. 1873.

A NOTE ON

THE CURABILITY OF CEREBRAL ANEURISM.

BY JAMES GREY GLOVER, M.D.

IT is always a pleasant thing to record recovery from the gravest lesions, even when nature has all the credit of the cure. For this reason I publish the following part of a letter received some time since from a medical friend in the United States in reference to the death of a dear relative. I do so with the more satisfaction, as Dr. Welch, of New York, is the pathologist answerable for the post-mortem examination. I need make no apology for the letter-like form in which the facts are vividly expressed:—"—— died of an aneurism of the internal carotid artery. Nine years ago she had an aneurism of the internal carotid artery, which ruptured; the blood extravasated at the base of the brain was absorbed, and she recovered—a thing unknown, spontaneous cure of aneurism of internal carotid. She then enjoyed nine years of uninterrupted good health. A second aneurism developed near the old one, just as the vessel leaves the carotid canal at the base of the brain, within the cranial cavity, of course. The only symptom she had during her illness was paralysis of the third cranial nerve. We had hoped this paralysis was functional, not suspecting an aneurism, and never having fully understood the nature of the cerebral trouble nine years since. She was perfectly well until three weeks before her death, when she was taken sick. She suddenly became unconscious, and remained so for twenty minutes. She came out of this, and the attack passed off, leaving only ptosis, dilated pupil, and strabismus. Ten days later she had another attack, similar to the first, but more severe. From this attack she rallied, but the third attack followed. She became suddenly unconscious, and remained so fourteen hours. When she died Dr. Welch made the autopsy, which revealed the aneurism which had ruptured, and the obliterated sac of the old aneurism which ruptured nine years ago. This, I believe, is the only case of its kind on record."

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

METROPOLITAN INFIRMARY, CLEVELAND STREET, W.

THREE CASES OF CARIES OF THE SPINE IN TAILORESSES.

(Under the care of Mr. JOHN HOPKINS, F.R.C.S., and Mr. ROBERT PARRY, M.B.)

DURING the year 1882 three cases of death from caries of the spine having several noteworthy features in common have occurred at this infirmary.

CASE 1.—J. P——, aged sixty-nine, tailoress, was admitted Jan. 2nd, 1882, with paraplegia. She had always had good health, and had never been laid up except from an injury to the hip twenty years previously, occasioned by a fall. Afterwards the limb had become shortened, though it was not believed to be fractured at the time. She had subsequently been able to get about without the support of a stick. A fortnight before admission, while walking along the ward of the workhouse, she suddenly lost the use of both her legs. Previous to that occurrence she had suffered in no other way than from a feeling of dejection and indisposition to work; she then had painful tumefaction of the abdomen and incontinence of urine.

On admission, the lower limbs were powerless, but reflex movements were readily excited by tickling, pinching, or grasping the foot. The seventh dorsal spine was slightly prominent and a little tender on percussion. A triangular area of œdema well defined in outline occupied the loins, the apex of the triangle being situated at about the twelfth dorsal, and the base at the top of the sacrum. Pains occasionally shot down the front of the thighs, more particularly the left, and there were pain and tenderness over the abdomen, which was distended; the bladder was greatly distended and overflowing, and the bowels were confined. The urine withdrawn measured two pints and a half, and on the following day it contained much blood, but this disappeared in three days. The use of the catheter was discontinued after a few days, as incontinence without retention came on. The prominence of the seventh dorsal spine became more marked towards the last, and its distance from the eighth dorsal spine could be altered by raising the patient by the shoulders. A band of hyperæsthesia about the level of the seventh rib was noted on Jan. 20th, and a small superficial bedsore.

The patient died on Jan. 22nd, twenty days after admission and five weeks from the onset of the paralysis.

Necropsy.—The bodies of the seventh and eighth dorsal vertebræ were carious, and had fallen together, and the intervertebral substance had disappeared. The abscess in connexion with the diseased bone contained inspissated pus, and formed a pouch on either side of the vertebral bodies larger than a hen's egg, to which the contiguous lung was adherent; there were three other small pouches projecting backwards into the spinal canal; two of these were placed symmetrically between the remaining portion of body of the seventh dorsal, and the posterior common ligament, leaving a furrow between them, at the lower end of which the third pouch projected backwards in the middle line. There was no congestion of the membranes or cord. On passing the finger over the cord a transverse sulcus was felt at the compressed spot. There were abscesses in both kidneys, with deep congestion, consequent on cystitis and pyelitis. All other internal organs were healthy. There was an old intracapsular fracture of the neck of the left femur.

CASE 2.—Sarah M——, aged thirty-four, tailoress, was admitted on December 5th, 1881, with paraplegia. When a child, she had abscesses and necrosis. Six weeks before admission, while walking in the street, her legs gave way under her, and next day her legs were paralysed. She kept her bed from that time, passed her urine under her, though at one time there was retention.

On admission, the patient was of spare build, thin, and anæmic. Several deep scars showed the seats of old abscesses and necrosis. The right eyeball was useless and shrunken, and part of the floor of the orbit had been removed by necrosis. The legs were somewhat wasted, useless, and flabby, and there was some anæsthesia of both feet. Reflex action was much heightened. There was incontinence of urine, and the bowels were confined. No prominence of the spines was made out on admission, but in January a note was taken that the seventh, eighth, and ninth dorsal spines were prominent, and the left transverse process of the eighth vertebra projected under the skin, the corresponding spine being directed to the right. Bedsores formed very rapidly, a night's rest in one position being enough to give an appearance of threatening gangrene on parts pressed upon. The patient became thoroughly emaciated, and many bedsores formed. She died exhausted, February 2nd, 1882. No post-mortem examination was made in this case.

CASE 3.—Elizabeth D——, aged forty-four, tailoress, was admitted March 24th, 1882, with a large cold abscess over the left thoracic parietes. The woman was a native of North Wales. As a child was delicate, and about puberty acquired a lateral curvature of the spine. Some time after that she fell heavily over an iron railing and hurt her left side. At eighteen years of age she came to London, and soon afterwards took up her late employment, which she pursued for twenty years. For five years before admission she had been feeling ill, but had no pain, and could not say she had anything in particular the matter with her. Four or five months before admission a swelling appeared in the left side; it was free from pain and gradually increased in size.

On admission she felt very depressed but had no pain; she had a slight cough, and on the evening of the 28th her temperature was 100° F. The swelling was situated on the left side, and measured in circumference about as much as a fœtal head at term, its centre being placed in the axillary line at about the fifth intercostal space. About a pint of

pus was withdrawn by the aspirator, and when the matter had again collected a freer opening was made and a drainage-tube introduced. A few days afterwards a small piece of dead bone was found in the cavity and removed. After the permanent opening was made there was very little discharge, and the wound was subsequently allowed to heal. The matter again collected, at first over the scapula, and disappearing from that spot reappeared in a line with the fifth rib round the chest. An examination of the spine at this time elicited no pain on percussion.

The patient first complained of pain in the right shoulder in the end of April. In October the pain was severe, and extended down the right arm into the ring and little fingers, which felt numb. On Dec. 1st there were pain and stiffness in the neck. Pressure in the vertex could not be borne, and there was a little tenderness on percussion of the seventh cervical spine. An abscess was felt deep under the right trapezius. On Dec. 6th there were retention of urine and weakness of the lower limbs, and three days later entire loss of power over the right foot, and partial loss over the left occurred. On Dec. 10th the paralysis was complete, and a threatening bedsore appeared over the sacrum, as well as incontinence of urine without retention. On Dec. 13th there were involuntary startings in the left leg and pain in the abdomen, "as if the bowels were being twisted into knots." On the 17th complete paralysis of right hand and weakness of left upper limb. Sensation in the lower limbs fairly good to both touch and warmth throughout. The feet felt numb and subjectively cold. A pain "like liquid fire" shot from the left shoulder across and down the right arm. Next day the tongue was red, marked by deep furrows, and patched with fur. There was a bedsore on the left heel. On Dec. 27th the bedsore over sacrum was the size of a half-crown piece, contained a deep slough. Accumulation of bronchial mucus occurred with dyspnœa, cyanosis, and death.

Necropsy.—There was well-marked lateral curvature to the right in the dorsal region. At the seat of the caries the cervical was flexed upon the dorsal portion of the spine, and rotated to the left. The rotation was due to dislocation forwards of the right side of the seventh cervical vertebra. The outer half of the right transverse process of the first dorsal was broken off, and reunited by firm fibrous bands both to the part from which it had been broken and to the posterior transverse process of the dislocated seventh cervical. The caries had destroyed nearly the whole of the body of the first dorsal, together with the under surface of the seventh cervical. A thin incomplete layer of cartilage loosely attached to the seventh cervical was all that remained of the intervertebral substance. That below the first dorsal had a thin layer of bone upon it, through which the caries had not quite penetrated. The abscess in connexion with the diseased bone had come forwards in the neck upon the right side beneath the trapezius and sterno-mastoid muscles. On the left side it had not burrowed in any direction. In the spinal canal it had passed between the vertebral bodies and their posterior common ligament both upwards and downwards; upwards to the superior limit of the seventh cervical, and downwards lower than the inferior limit of the third dorsal. (The sixth and seventh cervical and the first, second, and third dorsal were removed at the autopsy and set aside for subsequent examination; thus the opportunity was lost of making out if the above-mentioned channel communicated through an intervertebral foramen with the abscess on the left side of the chest.) The posterior common ligament was separated in nearly its whole breadth; in the middle line it remained bound down in places, so that a double channel freely intercommunicating was formed. In this channel was a layer of friable material, partly broken down, measuring in its thickest part about a line and a half. The said ligament and the membranes were all deeply stained, and the antero-lateral columns of the cord were congested. In the thorax there were firm pericardial adhesions throughout, and between the adherent layers were four or five collections of cheesy pus varying in size from a pea to a hen's egg, the largest of them being to the outer side of the cardiac apex. The left pleura was adherent throughout, but readily detached, and there were perihepatic adhesions. The thoracic and abdominal organs were healthy.

Remarks.—In the year 1882 there occurred at this infirmary 125 deaths, and of these the above three occurred from caries of the spine in tailoresses, who followed an arduous occupation of twelve hours a day in the same stooping position. These cases seem in a striking manner to bear out Mr. Hilton's statement in "Rest and Pain":—"I must state my belief that the majority of the cases of primary disease of the spine in children, and almost all those in adults, are the result of exercise persevered in after fatigue, &c."

LEEDS PUBLIC DISPENSARY.

ENCHONDROMA OF BOTH LUNGS, WITH SECONDARY GROWTH IN BRAIN; NECROPSY; REMARKS.

(Under the care of Dr. CHURTON.)

FOR the following notes we are indebted to Mr. P. J. Hudson, M.B., senior resident medical officer.

Annie S——, aged eighteen years, came under observation on August 4th, 1882, complaining of shortness of breath and severe cough. The family history was good, except for the loss of a brother from consumption (?). The patient had always been delicate, and she had the left leg amputated four years ago for diseased knee. The nature of the disease could not be ascertained, only that matter had come away from the joint for months prior to the operation. For the last sixteen months she had been getting thinner and had had night sweats, but continued to work till a fortnight before admission, when she discontinued, owing to pain in the right chest, dyspnœa, and spitting up of bloody phlegm, attributed to frequent chills caught at a flax mill. She was a dark, thin girl, of a general icteric tinge, though slight. On examination the right chest presented the usual signs of effusion, there being dulness in front below the third rib on sitting up, below the fourth on lying down, with annulled vocal resonance and fremitus, and absence of breath sounds. Above this point the latter were faintly audible, also a few moist *râles* on deep inspiration. Behind there was dulness from the third rib downwards; above this fair respiration, but resistant on percussion. No rub was heard or pain felt on deep inspiration. The left chest throughout gave a sense of resistance on percussion, and there was exaggerated breathing in front, but rather distant behind. Heart and other organs healthy. Temperature 101·4°. A hypodermic needle withdrew from the right chest fluid deeply blood-stained, and showing microscopically only many white and a few red blood-discs. The sputum was uniformly tinged with blood, and contained no elastic tissue. The symptoms not being urgent, she was ordered nutritious food, linctus morphiæ, and to take alternately, every hour and a half, one minim and a half of the solution of perchloride of mercury, and five-eighths of a minim of tincture of green veratrium.

Aug. 7th: Rather sick after the green (veratria) medicine. Temperature 101°, morning and night. Has night sweats.—14th: Breath-sounds over right chest more distant; other signs as before; no sickness; temperature 100°.—20th: Can lie only on the right side; suffers from shortness of breath; gums slightly touched. There is fair resonance now from the fourth rib upwards in front, and faint respiration is heard throughout. The dulness in the axilla extends from the fifth rib downwards and behind from the fourth rib, and respiratory sounds are more audible than on the 14th. There is a rub on deep inspiration at the right base. To continue the medicines every three hours (i.e., half the quantity), and have a blister over the lower right chest behind.—22nd: Pain returned; some sickness. To take the medicines thrice daily.—25th: Mr. Hudson removed seventeen ounces and a half of blood-stained fluid from the right chest by the aspirator, a quantity being left. Only blood-discs were detected in this fluid.—26th: Feels easier, and has no dyspnœa; can lie on either side. Ordered one drachm of tincture of quinine with decoction of cinchona, an ounce thrice daily.—28th: The blood-stained expectoration, though slight, continues daily. Has much frontal headache, and is very sick. To have an effervescing draught, with three minims of dilute hydrocyanic acid every two hours.

Sept. 1st: Signs of fluid in chest as before. Sweats much, but has no sickness. To have the quinine mixture again.—4th: Slight twitching of left arm and hand.—5th: Had a fit last night, being unconscious an hour, and the left arm and hand moved backwards and forwards. Is now quite sensible, complains greatly of frontal pain and of the left fingers being numb, though moved easily.—6th: Has slept well, but on waking felt the left arm heavy, and cannot now raise it

or move the fingers. No anæsthesia. Reflexes abolished almost. Differences of temperature felt. Left stump normal, and no other paresis. Heart normal.—9th: Can move the arm from the left shoulder.—12th: Much cephalalgia, the pain shooting over the right temple and back to the occiput. Very sick, independent of food. Temperature normal. To have whisky and laudanum cloths to the head, and the effervescing draught with one drachm of the tincture of hop every two hours.—16th: Sickness relieved. Pain in the head and chest worse. To have morphia pill (one-quarter of a grain) every three hours.—24th: No pain or sickness for four days. To take ten grains of calcium hypophosphite with tincture of nux vomica every four hours.—30th: Had a second fit in the night. Has had great pain in head for two days and attacks of blindness. The left upper extremity remains as before, but is often attacked with twitchings. Distant respiration throughout the chest, other signs as before. Bowels not confined. Twenty grains of the bromide of sodium to be taken with the above draught every two or three hours.

Oct. 2nd: Is sinking, but has very much less pain since the last medicine.—3rd: Takes the bromide with brandy every hour and a half, and is quite easy. Temperature normal. Is quite sensible.—4th: Died comatose.

Necropsy, thirty-six hours after death.—The body was fairly nourished. There was no wasting of the left arm. On opening the chest the pericardium contained two ounces of serum. The heart and its large vessels were normal. There was a quantity of dark fluid in the right pleural sac. The right lung was much retracted in front, and was found partly fixed posteriorly and of a bony consistence, and was removed with difficulty. It weighed fifty-seven ounces. The posterior portion or root of the lung was one mass of ossified tissue, and similar growths were scattered throughout the anterior portions. The left lung had a few nodular growths of the same character, mostly at its borders and root. The bronchial glands generally were much enlarged, and very hard. Except where adherent to the right lung behind, the pleura was free from the growths. The abdominal viscera were healthy; the vertebræ were normal. The skull cap being removed, and the dura mater divided, a growth almost round in shape was found situated on the surface, and in the substance of the right cerebrum, as follows:—It was three-quarters of an inch from the superior longitudinal sinus on its left, extending to the inter-parietal fissure on its right. Posteriorly it reached to one-eighth of an inch from the parieto-occipital fissure, and anteriorly to the junction of the superior with the middle frontal convolution. It thus roughly occupied the place of (1) the superior parietal lobule; (2) ascending parietal convolution; (3) ascending frontal convolution; and (4) superior frontal convolution. It could be shelled out of its bed without lacerating the brain substance, and weighed nine drachms. Rest of brain normal.

A section of the lung growth showed it to be ordinary osteo-chondroma. No lung structure was visible in the densest portion, but trabeculæ and medullary spaces, the former of which were calcified, and contained angular cells, some surrounded by cartilage shells, others mature and partly calcified, the latter (medullary spaces) fibrous stroma. The cranial growth contained principally the latter and many blood-vessels, together with scattered centres of cartilage cells. Portions of the lung growth on being decalcified by chromic acid showed partly compressed and obliterated infundibula, &c., in the places least invaded, whilst others were almost dissolved by this process.

Remarks.—The hæmorrhagic character of the pleural fluid, together with the history of a (?) suppurating knee-joint four years ago and the general symptoms, led to the diagnosis of miliary tubercle of the lung rather than from direct physical examination. The fixed cranial pain following on the chest mischief, and itself followed by left brachial monoplegia, led to the diagnosis by Dr. Churton of a secondary growth in the brachial motor area in the cortex of the right cerebral hemisphere. It was impossible to diagnose osteo-chondroma of lung without a definite history of the former (?) knee disease, as no characteristic cells were found in the sputa or pleural fluid, and no needle probably could have withdrawn anything characteristic from the lung growth itself, nor were there any pressure symptoms or glandular enlargements externally. The multiple nature of the growth makes it still more likely to have been secondary to an osteoid sarcoma of the lower end of the femur four years ago. It is worthy of note that the convolutions occupied by, or obliterated by, the cerebral growth, correspond to those which, when stimulated in the dog (according to Hitzig and Fritsch), cause extension, adduction, flexion, and rotation of the opposite fore limb, and in the monkey, according to Ferrier, the various complex movements of the opposite arm, especially following irritation of the posterior portions (posterior parietal lobule, posterior end of superior frontal convolution, &c.), and which were affected by the cranial neoplasm which had not advanced anteriorlly enough to affect the opposite leg, or, rather, stump.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

On Cases described as "Acute Rickets" (combination of Rickets and Scurvy).—Subperiosteal Hæmorrhage, probably Scorbutic, of three Long Bones in a Rickety Infant.

THE ordinary meeting of this Society was held on the 27th inst., Mr. W. S. Savory, F.R.S., Vice-President, in the chair. A very exhaustive paper, communicated by Dr. Thomas Barlow, upon the subject of infantile scurvy and its association with rickets was read in abstract, and was followed by a paper relating an example of the disease by Mr. Page. Dr. Hale White's paper on a case of scurvy with retinal hæmorrhages and dilatation of the heart, read at a former meeting (see THE LANCET, p. 406), was also read in abstract, time not permitting of its discussion on the previous occasion.

The following is an abstract of the paper on Cases described as Acute Rickets (combination of Rickets and Scurvy), by Dr. THOMAS BARLOW. The paper is a contribution to the study of a disease occurring in young children, of which several cases have been recorded in recent German and English medical literature, but of which, with one exception, no account of the morbid anatomy has hitherto been given. The writer first narrated a typical case, then gave an analysis of the principal symptoms observed in the recorded cases and in other cases of his own, then the results of some post-mortem examinations, and finally discussed the etiology and affinities of the disease. The typical case was given in full detail. The boy, aged fifteen months, was of a pale, sallow complexion, fat, but flabby. His rectal temperature was 101°, there was no nervous or visceral disease except that the liver was larger than normal. He was continually moaning, and when approached and touched screamed violently. The dominant symptoms were in the limbs, the right wrist was dropped, and the left thigh continually drawn up; the ribs were beaded, but there was no grooving of the thorax; the left thigh and leg were tightly swollen, assuming a cylindrical shape; the epiphyses of the knees were enlarged, and there was a tendency to knock-knee. There was profuse sweating about the head. The boy was a first child, born slightly before term, and seemed vigorous for the first six weeks, during which time he had his mother's milk, but since its failing he had been deprived of fresh food, his diet consisting of the various infant foods of Nestle, Robb, &c. The child sat up well, and stood with assistance at thirteen months old, but five weeks ago he ceased to do either, the left leg and ankle being swollen, and the child shrieking if approached. The child was taken to a well-known bonesetter, who said that one of the bones of the spine was out, and a presumed operation to set it right was performed, but as no explanation was given of the swollen wrist, dropped right hand, and condition of left thigh, further opinion was taken. The child was obviously the subject of moderate rickets, and the opinion was formed that under the periosteum of the left femur and tibia there was an effusion of blood, and that the extreme tenseness of the limb was due to blood extravasation in the deeper muscular layers with the serum filtered into the more superficial parts of the limb, and the view was held that the boy was suffering from the supervention of scurvy on rickets, though with no sponginess of the gums. The treatment suggested was to surround the whole of the left lower limb and the right leg with wet compresses, which had been thoroughly wrung out, surrounded with dry clothes closely applied. A complete change in diet was made: to the juice of raw beef sweetened a little, cow's milk, strained gruel, barley water, and orange juice. It

was ordered that the boy's crib should be placed near the fire, and the window opened wide for free play of fresh air. A great change occurred during the treatment. He was quieter and took his fresh food greedily, had healthy evacuations, and the tension of the left lower limb was less. The improvement was progressive. The urine became clear and free from albumen, and from excess of phosphates. The swellings of the wrist and lower limbs subsided, and at the end of a fortnight he made slight efforts to raise himself and move his limbs about. At the end of a month gentle shampooing with oil, and douches of tepid and then cold water, were commenced. No change was made in diet except substitution of beef tea for raw meat juice, and a small piece of underdone meat in muslin to suck. His medicine was one teaspoonful, and then two teaspoonfuls, of cod-liver oil daily, and an occasional powder of rhubarb and soda. Within eight weeks he got on his knees, and could stand with a little support. He was of a ruddy colour, and his skin and muscles felt firm. The author then gave an analysis of the principal symptoms in thirty cases, of which nineteen have been published (principally in Germany), the majority under the name of "acute rickets," and one under that of "infantile scurvy." The first English case was under the care of Mr. Thomas Smith at the Hospital for Sick Children, described under the provisional title of "hæmorrhagic periostitis." Other cases had been described by Dr. Gee, as "osteal or periosteal cachexia," and two by Dr. Cheadle, in which spongy gums were a marked feature, for which and other reasons Dr. Cheadle held them to be a combination of rickets and scurvy. The ten cases of the author led him to substantially the same conclusion. The author then gave an analysis of the important symptoms, the post-mortem appearances, the etiology and affinities of the disease with the ordinary form of rickets, congenital syphilis, &c. The evidence shows the ordinary form of rickets to be present in a considerable number of the cases, though in some the symptoms were very slight. It shows also that there is no affinity with acute periostitis, hæmophilia, or purpura. The parallelism of the disease with scurvy was shown both on anatomical and clinical grounds, and after giving a summary of the diet adopted in the recorded cases, the author came to the conclusion that the characteristic features of the so-called acute rickets are really due to "scurvy."

The next paper read was upon Subperiosteal Hæmorrhage, probably Scorbutic, of three Long Bones in a Rickety Infant, by Mr. HERBERT W. PAGE. The author recorded the case of an infant, aged nine months, extremely wasted, pale and ill, who was sent to him by Dr. Taylor, of Willesden, and who presented enormous enlargement of the shafts of the left femur and tibia, and of the upper third of the right tibia also. The swelling had been coming on and gradually increasing for about a month. The neighbouring joints were not affected, and there was no superficial sign of inflammation. Beading of the ribs and rickety enlargement of one radius led to the belief that the condition was in some way due to rickets, and this supposition was also based on the fact that the child had from birth been fed for three weeks on Swiss milk, and after that almost entirely on Nestle's and Savory's foods. There was no history of syphilis, and in the absence of general fluctuation no certain diagnosis was made. A trocar and cannula passed at one point in the thigh, where there was doubtful fluctuation, gave exit to a few drops of sanguineous fluid, the bone being found bare. Incisions were therefore made through the periosteum of both thigh and leg, and large blood-clots, which had to be broken up with the finger before any part of them could be removed, were found lying around the shafts, the periosteum being stripped up therefrom throughout their entire lengths. Being now properly fed, the child, whose recovery had seemed well nigh hopeless, began at once to improve, the blood-clots were gradually expelled, there was little or no suppuration, the wounds healed, and when seen three months afterwards the affected bones had resumed their normal size, and the periosteum its natural position in contact with the shafts. There is no hæmorrhagic diathesis in the family. The author referred to the difficulties in diagnosis presented by this case, especially in the absence of fluctuation, which was doubtless due to blood-clot being tightly packed between periosteum and bone. He is now inclined to regard the disease as scorbutic rather than rickety, and the hæmorrhage as the more essential element of the pathological condition than inflammation of the periosteum. The child had been reared on scurvy diet. Periostitis is almost unknown, even in the worst cases of rickets. There was no sign of inflammation either in the neighbouring joints or in the skin; and it is, moreover, noteworthy that both periosteum and bones have survived the attack. Such could hardly have been the issue of an acute hæmorrhagic periostitis, even though the hæmorrhage, as a local bloodletting, might have conduced to the safety of the periosteum. He referred to other cases, of which, indeed, there is only one definite example on record in support of this doctrine. A case was recorded by Mr. Thomas Smith in vol. xxvii. of the Pathological Society's Transactions as "Hæmorrhagic Periostitis of the Shafts of several Long Bones with separation of Epiphyses," where, after death, the shafts were found surrounded by blood-clots underneath the periosteum, and in which there were numerous hæmorrhages in the muscles also, with a large hæmorrhage in one lung, hæmorrhages, in fact, like those ordinarily seen in scurvy. In one of three cases recorded by Dr. Cheadle of "Scurvy Supervening on Rickets in Young Children," in addition to bleeding gums and other usual signs of scurvy, there were "hard swellings deeply seated in the flesh of each thigh, and the shafts of the long bones felt enlarged and swollen." The author had little doubt that in that case also the enlargement was due to subperiosteal hæmorrhage. The child had been fed on a scurvy diet, and the state of the gums very clearly told what unnatural agents had been at work. In his own case the diet was a distinctly *scurvy* diet, lacking every kind of fresh food, and he trusted that the record of it may lead to a surer diagnosis and better treatment in other cases where the absence of swollen and bleeding gums deprives us of an all-important clue to the nature of the malady.

Dr. STEPHEN MACKENZIE believed that the valuable papers that had been read would go far to remove the difficulties which beset the subject. He referred to two cases of the kind under Mr. Waren Tay's care, of which he had made the post-mortem examinations. One was an infant about four months old, who had been brought up on artificial food and London milk. There were extensive subperiosteal hæmorrhages around several of the long bones and the ribs; and also extravasations in the gums at the site of the non-erupted teeth, a condition differing from scorbutic sponginess, but not uncommon in these cases. In another case he had seen extravasation into the orbit, and beneath the skin of the arm. The second case he had examined post mortem was marked during life by a swelling over the lower end of the femur, which had been noticed for two months. The infant was eight months old, and the limb was helpless. The condition was thought to be syphilitic, and Mr. Tay prescribed grain doses of iodide of potassium. After two doses had been given, some ecchymosis appeared about the orbit, but no further purpuric manifestations, although the iodide was continued. Other swellings appeared on the limbs, and the child became marasmic and died. The periosteum was detached from the ribs by hæmorrhage, and the same condition occurred to several of the long bones. Hæmorrhages also occurred in the lungs, intestines, and kidneys, and the case was complicated with recent peritoneal tuberculosis. These cases, then, lent support to the views advanced by the authors of the papers. Dr. Mackenzie laid stress on the fact that purpura was not a disease *per se*, but dependent on various conditions. Referring to Dr. Hale White's case, he mentioned that for some years past he had sought for retinal hæmorrhages in cases of scurvy at the Greenwich Hospital, but had never met with them except in that one case. He attributed this to the fact, insisted on by the author, that the occurrence of retinal hæmorrhages is determined by a certain degree of anæmia. His own experience went to show that retinal hæmorrhages are not met with unless the corpuscular richness falls below 50 per cent., and that no matter what the disease producing the anæmia is. He had found such hæmorrhages in cases of hæmatemesis, where the blood standard reached this low level; and in idiopathic progressive anæmia the corpuscular richness is much less than this.—Mr. MACNAMARA remarked that in the tropics retinal hæmorrhages were not uncommon in scorbutic disease. He had often found them in natives who, after repeated attacks of intermittent fever, became scorbutic; and especially in scorbutic dysentery, where the ulceration of intestine is secondary to hæmorrhage in the submucous tissue. He had no doubt as to the scorbutic nature of Dr. Barlow's cases, and thought it remarkable that in no case did periostitis ensue on the subperiosteal hæmorrhage. He suggested whether some of the cases of acute suppurative periostitis, or acute necrosis of children, might not be secondary to the breaking down of clots found

as described. Speaking of the relation between syphilis and rickets, he had no doubt that the state of malnutrition upon which rickets depended might be brought about by inherited syphilis. It might be quite correct, then, to ascribe some of these changes to syphilis as one of the factors to which rickets and the scorbutic element were superadded. —Mr. R. W. PARKER thought it remarkable that so few cases should be recorded if the condition depended so much upon improper diet and hygiene, to which so large a number of children in London and elsewhere were subjected. For although young people do seem to enjoy an immunity from scurvy, yet the disease is very rife in the Russian foundling hospitals. Most writers regard the bone lesions and periosteal lesions as late manifestations of scurvy and secondary to profound cachexia; but in the cases related that evening these lesions seem to have been sometimes observed in children otherwise robust, and the development of the lesions to have been remarkably rapid. Nor did the cases exhibit the putrescence so common in scurvy, and the condition of the blood was not that usually described in this disease, for it coagulated firmly. He had made post-mortem examinations on three cases of "acute rickets," in which the bones were greatly softened, but there were no scorbutic appearances.—Mr. J. H. MORGAN remembered Mr. T. Smith's case, with which Dr. Barlow's cases were identical. The extremely vascular condition of the medulla of the shaft and the epiphysis in that case suggested changes in the vessels of the medulla itself, and might explain the occurrence in that case of fracture of the femur at a point below the epiphysis. He thought the evidence of scurvy was satisfactory, and it was interesting that in all the cases the scurvy was superadded to a rickety condition. The absence of symmetry in the distribution of the lesions was a point of distinction from the bone changes of congenital syphilis. — Dr. DREWITT said that all agreed as to milk being antiscorbutic, and pointed out that in London there must be thousands of children fed on condensed milk alone, without suffering from scurvy. He suggested that ships should, in addition to lime juice, be also well supplied with condensed milk.—Mr. SAVORY thought that Mr. Page's case showed that acute periostitis alone would not suffice to produce necrosis, for in that case the whole of the shaft of the bone was detached from the periosteum by hæmorrhage; yet the bone retained its vitality. This seemed conclusive evidence in support of the view he and others held that in cases of suppurative periostitis followed by necrosis there was osteitis as well.—Dr. BARLOW, in reply, said that he had frequently observed in these cases small ecchymoses on the gums on the sites of the growing teeth. One case had also ecchymosis of the eyelids, and a temporary partial proptosis. He had also seen the hæmorrhage around the ribs, a point observed by Poupart in the seventeenth century. The visceral hæmorrhages observed by Dr. Mackenzie were important additions, and in Mr. Smith's case there was a small hæmorrhage in the lung. Tuberculosis not infrequently developed in marasmic children. He quite concurred that the term "purpura" should not be held to denote a distinct disease, and remarked that the subjects of purpura suffered occasionally from temporary swelling and tenderness in the legs, suggestive of deep-seated extravasation. He would not like to say that these subperiosteal hæmorrhages never passed on to suppuration, but he had not yet seen any evidence of suppuration. In one case a small fluctuating point appeared above an epiphysis, which he attributed (from the conditions found in other cases post mortem) to accumulation of serum in the more superficial parts of the limb. In a case, which, however, hardly seemed one of this class, there was partial suppuration. Although the shaft of the bone is detached by the hæmorrhage, it is probably nourished through the epiphysis. He agreed that syphilis might be regarded as one of the factors producing rickets; but there was no evidence of syphilis producing hæmorrhage. He admitted the force of Mr. Parker's argument as to the paucity of such cases, notwithstanding the prevalence of the supposed etiological conditions, but believed that minor manifestations of scurvy were far more common in civil life than was admitted. Dr. Cheadle believes that many cases of stomatitis in children are due to scurvy, and they certainly soon get well on antiscorbutic treatment. Many of those cases may be overlooked, being regarded as rickets, the extreme tenderness and great feverishness of the children being obstacles in the way of thorough examination. Young people do suffer from scurvy, as the experience of the Russian hospitals, mentioned by Mr. Parker, showed. Aching in the limbs is given by writers on scurvy as one of the earliest symptoms; and the blood is by no means invariably altered in appearance. Although London children are often brought up on a diet capable of inducing rickets—e.g., bread and butter,—they are also largely fed upon potatoes, which are antiscorbutic. In the paper he had mentioned that some of the children had an extreme aversion to meat and vegetables, and such facts may serve to explain why in one family one child will suffer from scurvy and others from rickets. The difficulties were not greater than in the adult, and in all the element of idiosyncrasy must be borne in mind, some people escaping scurvy although placed under precisely the same conditions as those who suffer. The great vascularity of the shaft and medulla referred to by Mr. Morgan is present in well-marked rickets, and he rather attributed the occurrence of fracture below the epiphysis to the fact that the structure of the bone is less compact there, and more brittle, so that when the periosteum became detached, and the bone was left unsupported, it gave way at this spot on slight movement. Syphilitic lesions were symmetrical, but so occasionally were these under consideration. The main points of distinction from syphilitic lesions lay in the age of the subject and in the fact that none of the children were fed at the breast. Dr. Black used to treat his cases of scurvy at the *Dreadnought* on milk alone, and there was no doubt as to its antiscorbutic properties; but condensed milk—valuable as it is—certainly does not protect from scurvy. Fresh food was requisite. — Mr. PAGE said that his paper was mainly of interest as affording confirmation of the points advanced so fully by Dr. Barlow. No doubt his case would have got well had he adopted the measures followed by Dr. Barlow; but he was urgently pressed to relieve the child, and great relief was given by the incisions. He fully agreed with Mr. Savory that the necrosis so often seen with acute periostitis was due to inflammation of the bone itself; and the vitality of the bone in his case was tolerably conclusive that the condition was not one of hæmorrhagic periostitis. The fact of the blood coagulating was not fatal to the scorbutic theory, for the same happened in well-marked cases of scurvy. It was difficult to say why in some children improper nourishment should lead to rickets and in others to scurvy; but in his case the rickets was not marked, and the child had been most improperly fed from its birth up.—Dr. HALE WHITE said that since his paper was read he had found that Dr. Buzzard, in his article in "Reynolds's System of Medicine," mentions the fact of cardiac dilatation in scurvy, although he does not ascribe any symptoms to it such as those observed in his (Dr. White's) case.

PATHOLOGICAL SOCIETY OF LONDON.

Cancer of Stomach and Subcutaneous Tissue.—Lymphatic Cyst.—Tumour of Skull and Bladder.—Rheumatic Nodules.—Acute Gastritis.—Diffuse Lipoma.—Acute Yellow Atrophy of the Liver.—Vesical Calculus.

THE ordinary meeting of this Society was held on Tuesday, March 20th, Mr. J. W. Hulke, F.R.S., President, in the chair.

Dr. COUPLAND read the report of the Morbid Growths Committee on Dr. Sharkey's specimen of Syphilitic Disease of the Capsule of the Liver, in which Dr. Sharkey's description was confirmed.

Dr. FINLAY showed specimens from a case of Epithelioma of Stomach with widely diffused Secondary Growths. The patient from whom the specimen was obtained was admitted into the Middlesex Hospital, under the care of Dr. Cayley, on Sept. 24th, 1882. Six weeks before admission he had complained of aching pains in the back and epigastrium, and about the same time a small swelling appeared to the right of the umbilicus. This gradually increased in size and became tender, and was soon followed by the appearance of other similar tumours, varying in size from a pea to a horse-chestnut, on various parts of the body. He had had occasional hæmorrhage from the bowels, and was habitually constipated. He had never vomited blood, but had recently suffered from occasional attacks of retching. He was anæmic and emaciated, but with the exception of the subcutaneous nodules nothing abnormal could be detected about him; in particular no evidence of any internal tumour was obtained. One of the nodules, cut out during life, was

found on microscopic examination to consist of alveoli, lined with cells resembling columnar epithelium. The patient died after being about five weeks in the hospital, the nodules having increased in number and size. A week before death he had vomited all his food, but this was never a prominent feature of the case. The post-mortem examination, which was made by Dr. Fowler, thirty-seven hours after death, revealed a growth in the posterior wall of the stomach, occupying an area of about 3½ in. by 3 in. and extending downwards from the point of entrance of the œsophagus. There were widely spread secondary deposits in the mesentery, diaphragm, retro-peritoneal and bronchial glands, liver, right lung, and left suprarenal capsule, as well as in the subcutaneous tissues. Under the microscope the new growth was found to present in all the different parts a structure consisting chiefly of oval, circular, or horseshoe-shaped alveoli, lined with cylindrical epithelium, imbedded in a stroma of fibrous tissue. The type of columnar cells was most distinct in the growth in the stomach, the fibrous tissue most abundant in the subcutaneous nodules. The stomach was held to be the primary seat of the disease, and the blood to have been the agent in the dissemination of the cancerous infection to the remoter structures.—Mr. HULKE never remembered any instance of such a number of secondary epithelial nodules as in this case; and it was quite remarkable to find these nodules in a tissue so far removed from epithelial tissue in its nature as is subcutaneous tissue.—Dr. COUPLAND referred to a case of cancer of the sigmoid flexure with a secondary nodule at the umbilicus. From the structure of the nodule excised during life, Dr. Cayley surmised that the primary growth was in the alimentary canal; this greatly added to the practical interest of Dr. Finlay's case.

Mr. A. E. BARKER showed a Lymphatic Cyst. A child was in the University College Hospital under Mr. Marshall, suffering from what was diagnosed as nævoid lipoma of the thigh. The thigh was amputated at the hip-joint, and the child died in a few hours. At the autopsy a small cyst with a thin wall was found in contact with the wall of the bladder, the surface irregular, contents thin and serous; another, much larger, was found below the right kidney, just beneath the peritoneum. The sac was loculated with smooth lining. Another was found in the scrotum, extending beneath the penis, from right to left. All three cysts were in one line. Mr. Barker tried to inject blue fluid into them from the lymphatics of the testicle, and from the bladder, but failed. He considered them all to be dilated lymphatic spaces. The cysts were on the same side as the nævoid growth of the vessels.

Mr. BARKER showed a specimen of Prolapse of the Uterus, causing obstruction to the ureters. The bladder was drawn down with the uterus and lay between the thighs. The ureters and pelvis of kidney on both sides were dilated; there were signs of old interstitial nephritis in the form of punctate depressions on the surface of the kidney. There was no trace of inflammation spreading up from the kidney, but the changes seemed to be all due simply and solely to the obstruction of flow of urine into the bladder.

Mr. CLUTTON showed specimens from a case of Tumour of the Skull and the Bladder in a man aged sixty-two, who was first seen in September, 1877, with a swelling over and fixed to the left parietal bone, soft in the centre, with an infiltrating indurated margin. This was opened in October, and a large aperture in the skull was then found. He died in May, 1878, sinking under the profuse discharge from this ulcer and hectic. He suffered severely from neuralgia, but had no paralytic symptoms, nor any bladder symptoms. At the autopsy a hole three inches across was found in the skull, and an ulcer in the scalp, five by four inches. The skin around was infiltrated with new growth, and the margin of bone was spongy and in part dead. The exposed dura mater was thick and rough, and in its centre was an aperture the size of a florin, and beneath this the brain showed signs of commencing hernia. A tumour the size of an orange was found to occupy the left side of the body of the bladder, both inside and outside, its margin well defined. No other new growths were found. Microscopic examination of the tumour of the head showed in the main an alveolar structure, large and small groups of large cells, with distinct nuclei and nucleoli, with interalveolar small round and spindle cells. In places the large cells were scattered irregularly, in others bundles of spindle-cells were seen. This Mr. Clutton considered to be an alveolar sarcoma. The bladder tumour was of quite different structure, composed of round and oval cells like those found in sarcoma. In places there was a faint indication of an alveolar network, but the cells were not grouped together, nor in any other way did they resemble the large cells of the other tumour. Mr. Clutton said that the difference in the structure of the two tumours rendered the interpretation of the case difficult, but he thought it possible that the bladder tumour was a secondary development of that on the head.—Mr. BUTLIN thought that the skull tumour was an ordinary epithelium of the skull, and he believed that in the bladder was the primary growth. He hoped the case would be referred to the Morbid Growths Committee.—Dr. THIN suggested that the nodules in the skin should be examined, as there had been several cases of tumours springing from the deeper parts of the skin, depressing the bone, and growing into the diploë. He thought the skull tumour was like rodent ulcer.—Mr. ROGER WILLIAMS suggested that the two tumours were independent. The naked-eye characters of the bladder tumour were not those of epithelioma. Bladder tumours might not produce any symptoms unless they interfere with the ureter or the urethra, or were ulcerated. He thought the tumour in the bladder was a round-celled sarcoma.—Mr. HULKE said that tumours of the head might perforate the skull without producing any symptoms.—Mr. CLUTTON had carefully examined many sections of the specimen, and upon that he came to the conclusion that it was a sarcoma.

Dr. ANGEL MONEY showed microscopical sections of a Rheumatic Subcutaneous Nodule. The patient was a female, aged ten years, who had had scarlet fever, followed by rheumatism three years previously, from which time cardiac disease probably dated. She had had frequent attacks of rheumatism and some choreic movements. There was a history of rheumatic fever in the father, and one of chorea in a sister. There were signs of great hypertrophy of the heart; the rheumatic nodules had been noted by the patient for some time, possibly months; they were found in the right and left elbows and on the right patella. The clinical history was of a fluctuating sort, dyspnœa and œdema coming and going without much apparent reason; the patient died rather unexpectedly. At the autopsy the heart was found to be enlarged and dilated, the pericardium universally but not firmly adherent. Some nodules about the size of a millet seed were to be felt in the wall of the right ventricle. There were some slight valvular changes. The liver, spleen, and kidneys showed some of the usual changes, probably secondary to the cardiac mischief. Sections from a nodule on the back of the right elbow were interpreted to consist of fibro-cartilaginous tissue. A section of a nodule from the pericardium looked something like connective tissue from a tendon of a mouse's tail. There were the signs of a chronic diffuse peri- and myo-carditis.

Dr. CAVAFY showed a heart and some casts, and microscopic specimens of Rheumatic Nodules. The patient was a boy aged seventeen, who had suffered once from acute rheumatism, ever since which he had dyspnœa and palpitation, and he died from heart disease. The rheumatic nodules—sixteen in all—were found over hands, elbows, and patella. They were symmetrical and varied in size from half a pea to a hazel nut, skin over them healthy; they only ached occasionally and slightly; they were not tender. They were slightly movable over the bones, and freely so under the skin. The smaller ones were harder and firmer than the larger. There was found post mortem advanced heart disease, with mitral obstruction and regurgitation, and great dilatation and hypertrophy. A ring of minute rough vegetations was found on the auricular side of the mitral valve. The aortic valves were similarly diseased. Two nodules from the elbow were examined, they appeared to be attached to the triceps. A small one consisted of young actively growing fibrous tissue cells, and much intercellular tissue. A larger one had a much looser texture, though consisting undoubtedly of fibrous tissue; strands of fibres were separated widely by œdema and a cellular infiltration. Numerous curious figures were also seen, giving a fenestrated appearance; the meshes were square in shape, ladder-like; he thought that there was an infiltration of fibrine which coagulated and gave this appearance, for material in the bloodvessels and in these meshes stained in the same way. Both nodules were very vascular, and the small arteries were enormously thickened in the inner coat, so as to obliterate the lumen of some of the vessels. In the larger nodule thickened arteries were also seen, but most of the vessels showed only proliferation of the endothelium.

Dr. DREWETT showed a boy, aged seven, with Rheumatic

Nodules; the nodules had recently come out. These nodules occurred most generally over subcutaneous bones where they are most exposed to pressure and friction from clothes, and in this he thought they were homologous in origin to valvular vegetations. These nodules apparently always accompanied heart disease. He thought they were important in diagnosis, prognosis, and treatment.—Dr. PAYNE drew attention to the fact that very similar nodules to these are found in chronic rheumatoid arthritis; he had often met with them, and had seen them disappear. Last year he had a woman with chronic rheumatoid arthritis, who, two years before, had shown these nodules, but when last seen they had quite disappeared. He had seen them in cases of symmetrical enlargement and stiffness of the wrist, elbow, and radio-ulnar joints. He asked whether these nodules occurred otherwise than in the neighbourhood of chronically diseased joints, and whether they were not the result of changes similar to those going on inside the joint?—Mr. PARKER had examined nodules from four cases of this disease. None of them were so highly organised as Dr. Cavafy's. In one of Dr. Barlow's cases the vessels were not thickened so much. In all of his cases the nodules consisted of very vascular, coarse, white, fibrous tissue. The nodules developed and disappeared suddenly, and involved the tissue specially affected by rheumatism. His last case was in a girl, aged eleven, with severe chorea, and a nodule developed on the tip of each spinous process just when her choreic symptoms became notably worse, and he asked whether this was to be considered as a relapse of rheumatism.—Dr. STEPHEN MACKENZIE remarked that similar changes of the intima were seen in other inflammatory affections of bloodvessels, as in pyæmia and scarlet fever.—Dr. MAHOMED asked if the skin ever inflamed over these nodules. He had a patient who had many large nodules, and several of them were covered with red skin; some of them were softened—indeed, they looked like gummata. In a man with severe osteo-arthritis there were many nodules, but they were larger than those he had seen in children with a history of rheumatism.—Mr. EVE referred to a case of xanthelasma nodosum, brought forward by Dr. Gilbart Smith, in which the structure was like that of these nodules.—Mr. HUTCHINSON had several times seen these nodules inflamed, at least in chronic rheumatic arthritis, and some in cases of gout.

Mr. HERBERT PAGE showed a Stomach after Gastrostomy performed last month. The stomach was opened on the fifth day; no bad symptom came on till the twenty-second day, when the patient had a violent attack of vomiting; fever came on, and the patient died in collapse next morning. There was a parenchymatous inflammation of the stomach, which, he thought, was started by the wound in the stomach walls.—Mr. SILCOCK, who made the autopsy, said that the coats of the stomach were generally thickened, most so at the fundus. It was of a dead-white colour, with effusion under the peritoneum. On section milky fluid exuded. The rugæ were quite obliterated. In the peritoneum was a quantity of buttery lymph, but no plastic lymph. Thirty-one cases of this disease had been collected; the majority had arisen in acute fevers; others in cases of acute alcoholic poisoning; some had arisen from injury to the stomach. He suggested that in this case it originated from digestion of the margin of the mucous membrane at the opening in the stomach. The fluid in the stomach was crammed with micrococci.

Mr. HUTCHINSON showed a Fatty Tumour of the Neck of a man. Large masses developed quite symmetrically in the neck. The case was exactly like that recorded by Mr. Morrant Baker. Symmetrical masses of fat also were present under the jaw, and in both forearms. He had also symmetrical hypertrophy of the parotid gland, and tumours of the parotid. On cutting down on to the neck he found the mass was not encapsuled, but adherent to the skin; it was, indeed, hypertrophy of the subcutaneous fat. The mass removed consisted of very firm fat. He also showed two photographs of a man with a similar affection of the parotid gland and proptosis.

Dr. CAYLEY showed a specimen of Acute Yellow Atrophy of the Liver with clear limitation of the atrophied part. The atrophied portion showed no liver tissue at all. The symptoms were those common in acute yellow atrophy.

Mr. GEORGE LAWSON exhibited a Stone which he had removed from a man aged forty-eight at the Middlesex Hospital by lithotomy on March 10th. When the patient was examined, the stone was felt to be very hard and large, and Mr. Lawson thought that lithotomy afforded a better prospect of success than a Bigelow's operation. When removed, the stone was found to measure two inches and a half in length, two inches in width, and one inch and a half in depth. It weighed four ounces all but sixty grains. Its surface was nearly smooth, of a yellowish-white colour, and when washed was inodorous. On making a section of the stone about a drachm of a reddish-brown stinking ammoniacal fluid escaped. The nucleus of the stone was a mulberry calculus, very rugged in outline and measuring seven-eighths of an inch in each of its two principal diameters. The bed in which this calculus lay was too large for it, so that there was a free space around it, and this space was filled up with the reddish-brown fluid Mr. Lawson thought that the explanation of the manner in which this collection of ammoniacal fluid was incarcerated within the stone was the following:—At the period of the stone's growth, when the mulberry calculus was free in the bladder, there had been cystitis, and the interstices between the nodules had become filled up with mucus, and muco-pus mingled with ammoniacal urine. The irregularities of the stone being thus obliterated, it presented a tolerably smooth surface, upon which the salts of the urine were deposited in concentric laminæ, as seen in the specimen. A quantity of ammoniacal and tenacious matter was thus pent-up within the stone, and this undergoing decomposition and becoming stained with the colour of the oxalate of lime calculus with which it was in contact, produced the reddish-brown ammoniacal fluid which escaped when the section of the stone was made. The patient had done well.

MEDICAL SOCIETY OF LONDON.

Foreign Body in the Bladder.—Endemic Hæmoptysis and Distoma Ringeri.

AT the meeting of this Society on the 19th inst., Sir Joseph Fayrer, President, in the chair, Mr. HUGH SMITH related a case of Foreign Body in the Male Bladder, in which Bigelow's operation was performed. A Suffolk farmer, thirty-nine years of age, was admitted into King's College Hospital on Dec. 11th, 1882, with symptoms of stone in the bladder. On Dec. 16th lithotrity was performed; the calculus was easily friable, but it choked the blades of the lithotrite. Bigelow's apparatus was used, but it did not answer well at first. The lithotrite was reintroduced, and a piece of straw a little more than three inches in length was removed from the bladder. Bigelow's apparatus was again used, and several fragments were washed out. A few days later Mr. Henry Smith removed another piece of straw, two inches and a half long, with a light scoop lithotrite. Several large fragments of stone passed during micturition, some of them showing a distinct groove into which the foreign body fitted. Mr. W. Rose extracted some fair-sized fragments of calculus during Mr. Smith's absence, and shortly afterwards the patient was discharged well. In answer to questions, the patient said that he had passed a stalk of green grass down the urethra one day last summer, because he was suffering from retention of urine. He removed, as he thought, the whole of the grass passed; but soon afterwards he noticed a pricking sensation in the bladder, and observed that his water looked like porter. Had Mr. Henry Smith known the above history before operating, he would have taken other means to remove the foreign body. A light scoop lithotrite would have been used instead of a large and powerful crushing instrument. Bigelow's apparatus would not have been employed owing to the probability of the eye of the catheter becoming blocked, as it undoubtedly was, by the tough ligulate of the foreign body.

Mr. PEARCE GOULD exhibited one of Bigelow's latest Evacuators, and explained the several improvements introduced into it. He also showed the photograph of a stone weighing 1380 grains which had been removed by lithotrity at one single sitting by Professor Bigelow. He suggested that if Mr. Henry Smith had used one of the modern patterns of lithotrite he would not have had so much trouble by the clogging of the instrument.—The PRESIDENT was reminded of a case of stricture, where the patient, in withdrawing a gum elastic catheter, which he had learnt to pass himself, left half of it behind. Sir Joseph failed to extract it, but a year later he removed by lithotomy a large phosphate stone, which developed around the broken catheter. In India

stone is remarkably prevalent, but in those days lithotrity was hardly known. Once when operating for stone, on putting his finger into the bladder, it was pricked, and on withdrawing it, a large needle was found transfixing the stone. He was unable to say how the needle entered the man's bladder.

Dr. MANSON read a paper on Distoma Ringeri and Endemic Hæmoptysis (published on page 532).—Dr. COBBOLD said that when the parasite was sent to him for identification he at once recognised it as a genuine lung fluke and thus confirmed Dr. Manson's previous surmise. He described it in the Quekett Club's Transactions as Distoma Ringeri. The parasite reminded him of the D. compactum, which he, many years ago, discovered in the lungs of an Indian ichneumon. The position of the suckers and the form and branching of the vitellaria at once pointed to its true nature. It resembled also the D. Rudolphi discovered by the celebrated Austrian traveller in the lungs of the Brazilian otter, and the more recently discovered D. Westermanii described by Dr. Hebert in the *Archiv für Mikroscop. Anat.*, vol. xix. In most of these animals the flukes are encysted in pairs, generally lying immediately beneath the pleura, and as we descend the scale of vertebrate hosts, the flukes lose the more or less characteristic oval or oblong figure, becoming more or less attenuated, as in D. Bossi and D. cylindricum. (Dr. Cobbold exhibited the specimen of D. Ringeri, and also lung flukes from the ichneumon, frog, and snake.) He thought Dr. Manson had done excellent work in pointing out the parallelism subsisting between endemic hæmaturia and endemic hæmoptysis. The subject was of great importance in relation to tropical disease, and he hoped that the remedies employed would be efficacious, although, judging from the position in which the mature worms occurred in the lungs of animals, he feared they could not be reached by inhalations. In reference to the ciliated embryos, it was interesting to notice, that while in D. Ringeri it took at least a month to rear the actively swimming larvæ, in Bilharzia the rearing could be accomplished in from two to six minutes if the water was slightly warmed. Parasitic lung disease was extremely common in animals from nematode worms, which proved more fatal to their hosts than did the flukes. He congratulated Dr. Manson on the results of his opening investigation.—Dr. S. MACKENZIE thanked Dr. Manson for his researches and arduous labour carried on under great difficulties. He thought that cases of endemic hæmoptysis might probably be met with in this country.—The PRESIDENT quite agreed with the author and with Dr. Cobbold on the importance of these parasitic diseases. There were now several forms of flukes found in man. He appreciated the author's remarks about the geographical distribution of this disease, but thought this parasite would be found in other places.—Dr. MANSON briefly replied.

EPIDEMIOLOGICAL SOCIETY.

A MEETING of this Society was held on March 7th, Dr. George Buchanan, F.R.S., President, in the chair.

Surgeon-General MURRAY read a paper on the Delhi or Oriental Sore. He stated that this disease had attracted little attention in India previous to 1857–58, at which time the palace and city of Delhi were occupied by European and native troops. The military cantonment had previously been situated two miles outside the city walls, and this disease was rare amongst the troops, although cases were occasionally heard of there, and at Mooltan, and Lahore. After 1858 it was brought prominently to notice, as the troops in garrison at Delhi were attacked with great severity; from 40 to 70 per cent. were admitted into hospital suffering from the sore, whilst nearly half the regiments had slight sores, which were treated out of hospital. The disease was very tedious and troublesome, though only in two or three instances fatal. When severe or situated on a joint, it rendered the men unfit for duty. In 1865 the Government of India appointed a Commission to investigate the disease, to trace out its origin, and to point out a remedy. The author was President of this Commission, and he thus had an opportunity of accurate observation of the disease. It appears on exposed parts of the body; at first as a small pimple, like an irritated mosquito bite, and remains in this state for several days or weeks, sometimes even for months. It then slowly increases and a thin fluid escapes from the top, which dries and forms a circular scab, gradually increasing in size and thickness. When this scab is removed an indolent ulcer is exposed, with undermined edges and lobulated granulations in the centre, in healthy subjects like raspberries, but paler and more blue in cachectic cases. These ulcers when very broad show signs of cicatrising from the centre; in all there remains a depressed cicatrix after healing. This is the natural course of the disease, which may last from six months to two or more years, when uncomplicated with leprosy, secondary syphilis, miasmatic fever, or a cachectic state of the body produced by other diseases or famine. When such diseases exist they are aggravated and rendered more fatal. The Delhi sore appears identical with the "yaws" of the West Indies, "parange" of Ceylon, and the "bouton" of the eastern and southern shores of the Mediterranean. At Delhi, Mooltan, and Lahore the disease is endemic, and confined to residents within the city walls. The Commission at Delhi, after patient investigation, formed the opinion that the Delhi sore is a cutaneous disease, of parasitic origin, and that the foul water of the city wells was the habitat of this parasite. The water of all these wells was excessively impure. In some, according to analysis at this time, the water contained from 45,375 to 123,200 grains of organic matter per gallon. This germ, or parasite, finds entrance to the body during bathing or washing through an opening in the cuticle caused by any abrasion of the skin, and the most frequent channel is probably the surface of an irritated mosquito bite, as the ordinary situation of the sores is on an exposed part of the person, as the face, hands, and arms, while the hairy scalp escapes. The germ, once introduced, develops in the cutis vera, exciting inflammation in the surrounding parts, and the sore results. Attempts were made to detect the germ microscopically, but in vain. Since then Dr. Flemming and others have supposed they have discovered it; but, as Drs. Lewis and Cunningham, after careful examination, failed to see it, implicit confidence cannot be placed in less experienced observers. To determine the contagious nature of the disease six natives were inoculated from a dry crust; but no disease followed. They were then inoculated from a fresh sore, and twenty-three out of twenty-four punctures showed irritation, like that from vaccination, on the third day, which gradually extended till the sixth and tenth days, when remedies were applied to check the disease in four men, leaving it to take its course in the other two cases. The treatment recommended by the Commission was to avoid using impure water, or, if this be impossible, to boil the water before using it, and to have all wells cleared out every year. The local treatment of the sore is directed to destroy the vitality of the germ by the application of the actual cautery in the earliest stage, and potential cautery—potassa fusa or nitric acid, and carbolic acid or mercury in more advanced stages; following the destruction of the specific disease by simple dressing, and washing with diluted carbolic acid. In the discussion which followed, the President, Sir Joseph Fayrer, Surgeon-General Manifold, Dr. Scriven, Dr. Ewart, and Mr. Long took part.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on Wednesday, March 8th, Dr. H. Gervis, President, in the chair.

Cast of Female Bladder.—Dr. AVELING exhibited this specimen. The patient suffered from retention of urine for four days after delivery. This was relieved by the catheter, and the bladder was subsequently washed out. Three weeks after delivery the cast exhibited, which was formed by exfoliation of the vesical mucous membrane, was passed. Fifteen months afterwards the patient still suffered from incontinence of urine; but, except for this and a recto-vaginal fistula, was well.—Mr. HOPKINS WALTERS had seen a similar case, due to retention, which had lasted four days, from retroversion of the gravid uterus. The cast was passed the sixth day after relief of the retention. The patient recovered without further vesical trouble.

Fibroma of Ovary.—Dr. JOHN WILLIAMS exhibited a solid ovarian tumour removed by him. It was pear-shaped, about three inches in diameter at its thickest part, and consisted of white fibrous tissue, with areas of mucoid degeneration and in the centre extensive calcareous change.—The PRESIDENT remarked on the rarity of such tumours.

Tumours removed by Abdominal Section.—Dr. BANTOCK showed a dermoid ovarian cyst, a specimen of double hydro-

salpinx, and five uterine fibroids, which he had removed by abdominal section. In three of the cases the tumours, weighing upwards of 7lb., 4lb., and 2lb., respectively, were removed on account of pain, there not being much hæmorrhage. In one, on account of hæmorrhage, he removed the ovaries This was followed by metrostaxis lasting four weeks, and, at first, diminution in the size of the tumour. Three months after operation the uterus had regained its former size; the hæmorrhage recurred, and gradually increased, and therefore he removed the tumour, which weighed 3lb., and presented cystiform degeneration. In the remaining case the ovaries had been removed about a year previously by another surgeon, but this had been followed by increase in the hæmorrhage and no diminution in the size of the tumour. He (Dr. Bantock) therefore removed it. In cases such as these he thought oöphorectomy could not come into competition with hysterectomy, for cystiform degeneration of uterine fibroids was as surely fatal as ovarian cystoma. He could not concur in the opinion that hysterectomy should only be done when oöphorectomy had been tried and had failed. He did not think much was gained by ligature of the uterine arteries; the collateral circulation was too efficient. He had now performed twenty-two hysterectomies, of which twenty had recovered, in none of which had "full antiseptic precautions" been used.—Mr. KNOWSLEY THORNTON thought Dr. Bantock's cases illustrated the value of oöphorectomy. Removal of the uterine appendages had in each case been only imperfectly accomplished, and this accounted for the persistence of hæmorrhage. Moreover, the tumours were undergoing atrophy, the cyst formation being part of the degenerative process. He had seen these patients when hysterectomy was performed, and their condition of health seemed to him so good that without further information he did not understand the reason for the operations. He thought that the condition of patients was not so good after hysterectomy as after oöphorectomy; after the former there was a possibility of a permanent fistula, or of a ventral hernia.—Dr. SAVAGE said the condition of Dr. Bantock's patients was such as to justify the operation. The mortality was one in eleven, not greater than that of ovariotomy. Battey's operation he thought detestable.—Mr. DORAN thought long series of after-histories were needed before the profession could judge between the two operations.—Dr. ROUTH thought oöphorectomy (except as a *pis aller*) a shameful, and often useless, operation, unsexing the patient, and failing to cure. He thought evidence was required in support of Mr. Thornton's assertion that the operations were imperfectly done. The atrophy of the tumours might be due as much to the age of the patients as to the oöphorectomy. The ill-health of the patients was such as to justify the operations in Dr. Bantock's cases.—Dr. WYNN WILLIAMS had sent two of Dr. Bantock's patients to him, and thought the operation was thoroughly justified in each.—Dr. BANTOCK said the amount of hæmorrhage was such as to make the patients hopeless invalids, and he thought this justified the operation. Examination of the specimens showed that the ovaries had been thoroughly removed.

Uterine Polypi.—Dr. WYNN WILLIAMS exhibited two polypi, one fibroid, the other of mucous, intermixed with fibrous, tissue. The specimen in the second case was referred to a committee for examination and report.

The PRESIDENT then delivered an address, for which a vote of thanks was moved by Dr. R. Barnes, and seconded by Dr. Grailly Hewitt.

Turning in cases of Contracted Brim.—A short paper on this subject by Dr. BURCHELL was read. The author described a class of cases in which after several easy deliveries, the birth of later children became difficult. Out of 8000 deliveries he had met with forty-five such cases. He attributed the progressive difficulty of labour to deposit of bone on the sacral promontory. In these cases attempts at forceps delivery often failed, and then perforation was resorted to. He believed they were better treated by turning. Out of forty-five cases so delivered by him, he had saved the children in thirty-eight. He thought this practice was new when he first adopted it, and that still its advantages were insufficiently recognised.—Dr. ROBERT BARNES had largely practised turning in cases of minor degrees of contraction of the pelvic brim, and formerly placed it between the forceps and craniotomy. He now thought there were few cases in which Tarnier's forceps were not superior.—Dr. CHAMPNEYS said increasing difficulty of successive labours was accounted for by increasing size of the children, and diminished power in the mother. Progressive diminution in the size of the pelvis had never been verified by measurement. Either forceps or turning, if applied to all children, would show a large percentage of success, although not really beneficial.

HARVEIAN SOCIETY OF LONDON.

AT the meeting of this Society, held on March 15th, the President (Dr. E. Symes Thompson) in the chair,

Mr. PEPPER showed with Mr. HOWARD HAYWARD a patient whose upper jaw he had excised. He was admitted into St. Mary's Hospital with a soft, painful, and rapidly increasing enlargement of the left upper jaw. This was at first thought to be due to suppuration within the antrum; but an exploratory incision elicited the fact that the swelling was caused by some solid or semi-solid growth, so it was decided to remove the upper jaw. This was done by the usual method, the arch of the soft palate being left entire by means of a horizontal incision in front of that structure, the hard palate having been previously divided down the middle line. As the growth involved the floor of the orbit, and reached over to the opposite side through the septum nasi, the removal of bone was necessarily extensive, and the operation proportionately formidable; the patient recovered, nevertheless, without an unfavourable symptom. The growth was of a sarcomatous nature, with round and spindle cells intermixed. On her departure from the hospital the patient was almost toothless and speechless and much disfigured; but since that time an apparatus had been devised for her by Mr. Howard Hayward, which had wonderfully improved her appearance, her articulation, and her masticatory powers. Mr. Howard Hayward exhibited the plate which had effected such an improvement in this patient, and also plaster casts he had taken of the case, showing the very large cavity left from the operation.—Mr. GANT congratulated the authors on the success of their case.

Mr. MALCOLM MORRIS then exhibited some cases of Lupus. The first was a typical case of lupus erythematosus of seven and a half years' standing. The feature of interest in the case was that since the treatment of free scarification of its margins had been adopted, there had been no further extension of the disease. The next was a case of lupus erythematosus of twenty years' duration; the disease had attacked both arms and legs before the case came under the author's observation. The third case was in a boy aged fifteen. The disease, which existed on both sides of the face and on one arm, commenced as a small red spot, which gradually spread, leaving atrophy of the skin in the centre of the patch, while round the margin was a curious raising of the surrounding skin, which seemed to be of a warty nature. A remarkable feature of the case was that the warty margin of the patches varied with the season of the year, being well marked in the spring and summer, but almost disappearing in the autumn and winter. There was a long line of the eruption on the left arm. The boy had five years ago been under the care of Mr. Hutchinson, who had made drawings of his condition. These were shown to the meeting, and Mr. Malcolm Morris pointed out that since then there had been no extension of the disease. Mr. Hutchinson had called it lupus marginatus, while other observers considered it to be ichthyosis.—Dr. STEPHEN MACKENZIE could not accept the third case as one of lupus, he thought it was of a papillary nature and of nervous origin. It was not in his opinion connected with the lymphatics, and there was no destructive lesion, as in lupus.—Mr. PEPPER thought it remarkable that if the disease were of neurotic origin there should be an absence of neuralgic pains, and pointed out its irregular distribution on the face as against that theory.

Dr. WILLIAM EWART exhibited a girl, aged eight, who had been for the space of one month the subject of severe convulsive attacks, presenting some of the features of Hystero-epilepsy. There was no hereditary history of insanity, epilepsy, or hysteria. The exciting cause appeared to have been a fright, but a predisposing influence was also noted in the shape of a recent attack of diphtheria. A strongly hysterical element was traceable throughout the case. The admission of the patient into the Belgrave Hospital for Children was followed by rapid improvement. Moral management and the administration of bromide of potassium were the chief methods of treatment resorted to in this instance.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

AT the meeting of this Society on March 1st (Mr. B. Walker, President, in the chair),

Dr. LAW showed the morbid specimens from a case of Disease of Aortic and Mitral Orifices, where an ossified cystic kidney was found post mortem on the left side. There were no symptoms indicating the condition during life. Dr. Law referred to the rarity of the case, and in answer to a question, remarked that authorities were divided as to whether the kidney was really ossified or simply infiltrated with calcareous plates.—Dr. LAW also exhibited a specimen of Cancer of the Pylorus. The cancer was of enormous size, involving quite two-thirds of the pyloric end of the stomach. Dr. Law remarked on the difficulty of diagnosis during life, owing to the absence of symptoms, vomiting being absent for weeks before death, though solid food—e.g., rabbit, was daily partaken of. Hæmorrhage was absent, and pain was, as a rule, slight. The growth had been examined microscopically, and was found to be of well-marked sarcomatous character.

A patient suffering from Charcot's Disease, from Dr. Bartolomé's wards at the General Infirmary, was introduced by Mr. C. ATKIN. He was aged forty-seven, and had had for four years lightning pains, ataxic gait, and bilious attacks. Last September a well-marked gastric crisis compelled him to keep his bed for several weeks, and on attempting to get up he found that the right knee was swollen, and that he could put no weight on the limb. On admission into the infirmary the limb was found swollen and helpless, and the tibia and fibula were painlessly dislocated backwards. Mr. Atkin alluded to Volkmann's statement that tabetic arthropathy is really traumatic, and due to the awkward movements of an ataxic patient; and after mentioning the diagnosis between this disease and osseo-arthritis he referred to syphilis as the prime cause, an opinion held by Erb, Gowers, Westphal, Buzzard, and Fournier, though opposed by Leyden and Lancereaux. The bladder symptoms in this case were interesting and peculiar, the urine not flowing readily away through the catheter, but being jerked out by the movements of the diaphragm. The Argyll-Robertson pupil was said to be present, but there was no optic atrophy, the latter condition, according to Dr. Gowers, only occurring in 15 per cent. of ataxics. No case, it was said, with the tripod of symptoms—viz., lightning pains, Westphal's test, and Argyll-Robertson's pupil—had ever been known to recover. The prognosis of the state of the knee was bad, as it came under the class that M. Charcot called "malignant."

Dr. GWYNNE read a paper on Infantile Paralysis. After a short historical sketch of the disease, he dwelt upon the pathology of the affection as far as it had been ascertained. He drew a comparison between the symptoms and pathology of this disease with those of progressive muscular atrophy, and suggested the possibility that they were not so closely allied as Charcot endeavoured to prove. As regarded the initial fever that ushered in the symptoms, he gave it as his experience that it was rather the exception than the rule. He regarded the etiology of the disease as still very obscure, and thought it probable that many of the cases considered under the common title of infantile paralysis belonged to distinct lesions, and ought to be differentiated. He did not think treatment had much to do with the result; but at the same time thought all the means recommended should be employed, especially dwelling upon the use of galvanism and keeping up artificially the heat of the parts affected. He recommended the galvanic current to be first used, and afterwards, when the limb responded to the faradaic current, that it should also be employed. He generally employed from ten to twelve cells or even more, the positive pole being applied to the spine at or above the seat of supposed lesion and the negative to the limbs after the labial method. The use of injections under the skin of ergotine, strychnine, &c., he had no experience of.

MIDLAND MEDICAL SOCIETY.

THE ordinary meeting of this Society was held on March 7th in the Medical Institute, Birmingham, Dr. Malins, President, in the chair.

Mr. WM. THOMAS showed a child with Talipes Equinovarus, which was being successfully treated by means of manipulation and the application of plaster-of-Paris cases.

Mr. JORDAN LLOYD showed for Mr. West a Kidney which the latter had removed through a Lumbar Wound four days previously. The patient, a boy, aged fifteen, received an abdominal injury in November last; this was followed by hæmaturia, the development of a lumbar tumour, pus in the urine, and pyrexia. In December the aspirator drew off 55 oz. of purulent fluid from the kidney; this was repeated a week later and followed up by a lumbar incision and the insertion of a drainage-tube. Eighty ounces daily of purulent ammoniacal fluid were passed through the tube. As the patient was rapidly emaciating, nephrectomy was performed. The kidney measured 8 inches in length, 4 inches in breadth, and 3 inches in thickness, and weighed 16 ounces.—Mr. Lloyd also exhibited the Tibia and Fibula removed by amputation from a boy, aged nine years. The specimen showed acute osteitis involving the lower epiphysis of the fibula, the upper end of the tibial shaft being similarly affected. There were no inflamed tissues between these points, but, by extension, there was pus in both the ankle- and knee-joints. After removal of the limb at the lower third of the thigh, convalescence was rapid.

Mr. MESSITER (Dudley) exhibited a male adult on whom he had successfully ligatured the left Common Carotid Artery to arrest Hæmorrhage from the Tonsil. The history indicated a swelling of the left tonsil, ulceration, and two attacks of copious bleeding. On the second occasion Mr. Messiter tied the main artery, and a rapid convalescence followed. It was thought that the ascending pharyngeal artery was the probable source of the hæmorrhage.

Dr. SUCKLING showed a living case of Myxœdema. The patient was a woman, aged thirty-five, who had been ill for ten years, the first symptoms being drawling speech and puffy eyes. The face is now œdematous-looking, but does not pit on pressure; the skin is translucent, with a pinkish tinge on each cheek; solid œdema of each eyelid; the tongue, large and pale, moves slowly; general integument is dry and rough; hands swollen; lower extremities look swollen, but do not pit; speech slow and words are slurred; locomotion slow, but no loss of coördination; urine pale, of a low specific gravity, no albumen, seventy ounces passed daily; muscular contractions with electricity much below normal; this Dr. Suckling attributed to the bad conducting power of the skin, due to its dry condition and probable infiltration with mucin.

Mr. MESSITER (Dudley) read a paper on Trephining in Cases of Injury to the Skull, and gave details of five instances in which this operation had been performed by himself and his colleagues at the Guest Hospital, Dudley. He was of opinion that to trephine early in many cases of cranial injury was, with the aid of Listerism, of the utmost importance and a practice to be commended.

Dr. A. H. CARTER read a paper on Certain Variations of the Pulse in Diseases of the Heart, in the course of which he discussed the diagnostic, prognostic, and therapeutic aspects of undue frequency, irregularity, and intermission of the pulse in their relation to different cardiac lesions.

Reviews and Notices of Books.

The International Encyclopædia of Surgery. Edited by JOHN ASHHURST, jun., M.D. In Six Volumes. Vol. II. pp. 754. London: Macmillan and Co.

THE second volume of this work has succeeded the first within a comparatively short interval, and Dr. Ashhurst has by his selection of contributors again given to the profession, both in America and in this country, a series of very valuable contributions to medical literature. The present volume contains the following articles: Contusions, by Dr. Hunter M'Guire; Wounds, by Thomas Bryant; the Antiseptic Method of Treating Wounds, by W. Watson Cheyne; Poisoned Wounds, by John Packard; Sabre, Bayonet, and Arrow Wounds, by Dr. J. H. Bill; Gunshot Wounds, by Dr. P. S. Conner; Effects of Heat, by Dr. Thomas Morton; Effects of Cold, by Dr. J. A. Grant; Abscesses, by Mr. Howard Marsh; Ulcers, by Dr. J. T. Hodgen; Gangrene and Gangrenous Diseases, by Dr. E. M. Moore. Venereal

Diseases: Gonorrhœa, by Dr. J. W. White; Chancroid, by Dr. F. R. Sturgis; Syphilis, by Dr. Arthur van Harlingen; Bubon d'Emblée, &c., by Dr. H. R. Wharton. Surgical Diseases of the Skin and its Appendages, by Dr. J. C. White; Diseases of the Cellular Tissue, by Dr. Joseph W. Howe; and lastly, Injuries and Diseases of the Bursæ, by Charles B. Nancrede. It will thus be seen that, with the exception of the articles of three Englishmen, Mr. Bryant, Mr. Cheyne, and Mr. Howard Marsh, the whole of this volume is written by American physicians. A good reflex is consequently obtained of the views and modes of treatment employed by our brethren across the Atlantic in some subjects, especially in that of gunshot wounds, in which their experience has been exceptionally extensive. Dr. Ashhurst states in the preface that the late Dr. Otis, the justly distinguished author of the "Surgical History of the War," responded with enthusiasm to his request that he should undertake the article on Gunshot Wounds, but failing health interfering with his ability to work, he put off the task from time to time, and died before he had written it. The editor, however, has, in our opinion, every reason to be satisfied with Professor Conner of Cincinnati, who has supplied Dr. Otis's place, and, who has evidently had very large experience, has written a really excellent article on gunshot wounds.

Dr. J. H. Bill's article on Sabre and Bayonet Wounds, and on Arrow Wounds, is extremely interesting, the latter part of the article being to English readers original. Sabre wounds, he says, are very rare in modern warfare owing to reduction in the cavalry arm and to the changes in the duties now performed by it. As usually employed, the sabre has a dull edge, and the wounds it makes are more or less contused, but they heal as readily as incised wounds, though they are more apt to be followed by scars. The number of wounds inflicted by the bayonet appears from the statistics collected by Dr. Bill to be very small. Of 11,900 British wounded in the Crimea, there were only seventy-six cases of bayonet wound, with seven deaths, and eighty-seven of sword wound, with one death. In the American War of the Rebellion, out of a total of 400,000 wounds there were 22,700 incised and 5900 punctured wounds, but few of these were inflicted with sabre or bayonet. The fact is that the bayonet can only be used at close quarters, and one party or the other gives way and retires—not to say runs—before the weapons are actually crossed. It is also true, however, that, as Dr. Bill states, the soldier dislikes to use his bayonet. He was told by an officer engaged in the Mexican War, in 1846, that at the capture of the city of Mexico he saw soldiers firing their muskets into the bodies of certain of the enemy to whom quarter had been refused, with the bayonets actually resting against the persons of the slain. In regard to arrow wounds, which are still seen in the fights the Americans have with Indians, the bow-and-arrow is so formidable an instrument, that Dr. Bill thinks it not impossible that it may again become a military weapon, especially in the hands of cavalry. The arrow, by reason of its velocity, has great penetrating power, and when it has once entered it is grasped by the tissues with amazing firmness, so that it is extremely difficult to extract, even when the shaft is still present. When the head alone remains imbedded, it is almost impossible to accomplish its removal, which, however, is absolutely necessary, without enlarging the wound. He depicts some ingenious instruments that have at various times been employed for the purpose of extracting the head. The arrow can be aimed at fifty yards as correctly as the revolver, and can be shot nearly as fast. Indeed, Dr. Bill thinks that at close quarters and in a *mêlée*, it is a weapon more to be trusted than the pistol. Is it possible that in the revolution of time we shall have butts in Hyde-park and a body-guard of archers, who would of course be Scottish, for Her Majesty? The causes of death from arrows are usually hæmorrhage and peritonitis.

The subject of Gonorrhœa, by Dr. J. W. White, is treated very fully in the following order: History, nature, varieties; which in the male include the typical or acute form, the subacute form, and irritative or abortive gonorrhœa, with their complications—gleet, strictures of large calibre, seminal plethora, urethral anæsthesia, and neuralgia from urethral irritation; in the female the subject is discussed under the heads of treatment, varieties, and complications; and lastly, Dr. White discusses gonorrhœa in anomalous situations. The drug named Kavakava, from Fiji, is mentioned, and is reported to have a marked action upon the genito-urinary tracts. Chronic gleet is said by Mr. Kesteven to yield readily to its effects, and in chronic cystitis it possesses an influence superior to any other remedy with which he is acquainted. Dupuy considers it to be a sialagogue, a bitter tonic, a gentle excitant of the nervous system, a powerful diuretic, and a blennostatic. Balsam of gurjun, or wood oil, is stated to have been used with advantage as an anti-blennorhagic. In the treatment of chordee Dr. White recommends the employment of bromide of potassium, which he thinks has fallen into undeserved neglect. He also mentions an excellent plan originally suggested by Dr. Scarenzio—of the hypodermic injection into the perineum of from one-fourth to one-fifth of a grain of morphia in solution when the chordee is persistent and very painful. Dr. White recommends the employment of opium suppositories and of a sufficient number of leeches to take away from eight to ten ounces of blood. He has little faith in soluble bougies, such as those containing iodoform, tannin, acetate of lead, carbolic acid, and oil of eucalyptus. In treating of vulvitis and vulvo-vaginal abscess as a complication of urethra, a good table is given, setting forth the points of diagnosis between this disease and pudendal hernia, cyst of the labium, and hydrocele of the round ligament. Some coloured lithographs, presenting tolerable but not extraordinarily good illustrations of acute gonorrhœa with partial phimosis, balano-posthitis with herpetiform ulceration, paraphimosis with consequent ulceration, gonorrhœa in women, epididymitis, gonorrhœal conjunctivitis, and vulvo-vaginal abscess, accompany this article.

Mr. Howard Marsh's article on Abscesses is deserving of praise. As inflammation with, we presume, its sequelæ is to be treated of in another part of the Cyclopædia, it was not altogether an easy one to write, but Mr. Marsh's arrangement of the subdivisions of his subject, and the mode in which he has treated them, leave nothing to be desired, and furnish a succinct and very instructive essay on the varieties, complications, terminations, and treatment of abscesses, enriched with many illustrations drawn from his own experience.

Venereal Diseases occupy, as they deserve to do, by far the largest section of the volume, and are considered under three heads, of which the first, embracing the simple Venereal Ulcer, or Chancroid, has been written by Dr. F. R. Sturgis, of New York; the second, including Syphilis, by Dr. Arthur van Harlingen; and the third, Venereal Diseases, including bubon d'emblée, warts, yaws, sarangi, sibbens, radesyge, and some other affections, by Dr. H. R. Wharton. Dr. Sturgis, whose experience has been very large, gives an interesting account of the gradual recognition by the profession of the two forms of venereal ulcer, now termed chancroid and chancre. He is himself an uncompromising dualist, and believes thoroughly, as we are inclined to do, in the specific distinction between soft and hard chancres, or rather between chancroid and the initial lesion of syphilis. He gives the following characters as distinctive of the chancroid sore. An absence of any period of incubation, the sore usually appearing within the first eight days after the infecting coitus; the property of

auto-inoculation; the absence of induration at the base; the copious purulent secretion; the punched-out and undermined edges of the sore; the eroded and irregular appearance of the floor; and, lastly, the greyish-yellow layer covering the floor. These symptoms must be taken collectively, for hardness of the base may be absent in the initial lesion of true syphilis, and other forms of pus when inoculated may produce sores. On the whole, he thinks it unnecessary to admit the existence of a specific virus in this form of ulcer, but considers that chancroid is derived from the secretion of another chancroid, or from a virulent (chancroidal) bubo, and from nothing else.

The section on Syphilis, by Dr. Arthur van Harlingen, is not at all points in perfect accord with that on Chancroid. Dr. Sturgis seems inclined to give up the idea of the existence of a specific virus in chancroid; whilst Dr. Harlingen holds fast to the doctrine of two kinds of venereal virus, the syphilitic and the chancroidal, and considers further that the two poisons can be inoculated simultaneously. He discusses the question of vaccino-syphilis, and, after giving the details of various outbreaks, observes that vaccino-syphilis may be derived from two sources, the vaccinifer and the vaccinated. The contagion is carried by means of the blood, and possibly by the epithelial scales and the white globules, and may infect either the vaccinifer or the vaccinated. He is satisfied that the initial lesion of syphilis is always a chancre, the average duration of incubation being forty-five days.

OUR LIBRARY TABLE.

A Treatise on Human Physiology. By JOHN C. DALTON, M.D. Seventh edition, with 252 illustrations. London: J. Churchill. 1882.—This work presents a feature that is quite exceptional in our experience. It is a new edition of a well-known treatise on Physiology. It is well worked up to the present date; and yet it is not enlarged, but, on the contrary, is actually smaller than the last edition by 100 pages. This is in every respect highly creditable to Dr. Dalton's industry; for few are aware how difficult it is to intercalate new knowledge with old, or how a few words introduced at the commencement of a section involves the reconstruction, or at least rewording, of many subsequent paragraphs. In the volume before us, which has now reached its seventh edition, the last edition being published in 1876, the section devoted to physiological chemistry has been in great part rewritten, the characters of the albuminous compounds and of the ferments revealed by late researches being specially introduced. The arrangement of the proteid bodies into albumins, peptones, globulins, derived albumins, fibrin, coagulated proteids, and lardacein given by Gamgee, which is so convenient for teaching purposes, might, however, with advantage have been introduced. We notice, too, that nearly every page has received some touches, showing that it has been carefully revised, the reduction in size in the entire volume as compared with its predecessor being obtained not by leaving out points of essential importance, but by reducing statements previously given in a more diffused form. The account of the nervous system has been much enlarged and improved, and the book as it now stands may be regarded as a very good introduction to the study of physiology, and as supplying the student with all the information on this subject he need possess before entering upon the study of medicine.

A Compendium of Modern Pharmacy and Druggists' Formulary. By WALTER B. KILNER, Pharmaceutist. Fourth Edition. London: Henry Kimpton. 1882.—This work is intended primarily for chemists and druggists, but contains much useful and practical information which cannot fail to prove of interest to medical men. The tables alone would make it valuable as a work of reference. The formulæ have been carefully selected, many of them, although commonly used in America, being but little known in this country. For the preparation and compounding of elixirs alone there are over three hundred prescriptions. Some, it must be confessed, are most complex, and it would puzzle us to give an opinion as to the physiological action of the compounds they are intended to produce. For example, elixir of damiana contains, in addition to the fluid extract of that drug, hydrastis, nux vomica, orange-peel, cardamoms, glycerine, and hypophosphite of potash and soda. The compound elixir of tar seems to be a kind of universal cough medicine, and contains nearly twenty ingredients, including pure pine tar, pine sawdust, lobelia, Jamaica dogwood, yerba santa, Hoffman's anodyne, oil of anise, sassafras, oil of peppermint, tartar emetic, and muriate of ammonia. The extract of jaborandi has a composition almost equally complex. The simple and compound extracts of cascara sagrada are by no means bad preparations, and will probably be found useful in cases of obstinate constipation. The compound elixir of chloroform may be regarded as a pleasant substitute for chlorodyne. Much of the information respecting flavouring and colouring, although curious and interesting, is of value only to those actually engaged in dispensing. The chapter on Specific Medicine is practical, but the author, in the absence of a medical education, blunders frequently in the use of technical terms. Such a word as "peretonites" is not familiar to English readers. There are chapters replete with information on Emulsions, Medicated Wines, Pills, Perfumes, Pomades, Syrups, Toilet Waters, and other subjects of more or less interest to chemists. On the whole the work has been well done, and the information it contains is fairly accurate.

Mittheilungen aus der Ophthalmiatrischen Klinik in Tübingen. Herausgegeben von Dr. ALBRECHT NAGEL. 3 Heft. 1882.—This part contains three articles: one by Schleich on Myopia, a second by Weiss on the Anatomy of the Myopic Eye, and the last by Professor Nagel himself on the Clinic of the Tübingen Eye Hospital. The article by Schleich is an important one, and gives the results of a large number of observations extended over many years in regard to the relation of myopia with sex, age, occupation, heredity, and other determining causes of the disease. The number of patients examined carefully, with a view to all these circumstances, has been 578, of whom 410 were males and 168 females, or 70·9 and 29·1 per cent. respectively, though the general proportion of all cases attending the hospital was 58·3 males and 41·7 females. The proportion of cases in regard to age was, up to ten years, 7 males, 3 females; from ten to twenty years, 137 males, 46 females; from twenty-one to thirty, 134 males, 35 females; from thirty-one to forty, 39 males, 25 females; from forty-one to fifty, 40 males, 21 females; from fifty-one to sixty, 26 males, 25 females; from sixty-one to seventy, 24 males, 10 females; over seventy, 3 males, 3 females. The average age was 30·9. The youngest was a boy of six. Though many infants were examined, not one case of myopia was observed in them. The numbers in relation to occupation were: teachers, and those engaged in intellectual pursuits, 43; official, 46; merchants, 33; students, 164; artisans and peasants, 124; women of position, 61; country women, 76; maidservants, 20; schoolgirls, 11. Of the whole number of myops forty-seven were myopic on one side only. The lower grades of myopia, requiring three, four, five, and six dioptries for correcting glasses, were much the most common. The ophthalmoscopic appearances are given in some detail. Dr. Weiss gives at considerable length the anatomy of slight and of severe degrees of myopia.

Archiv für Anatomie und Physiologie. (HIS, BRAUNE, und DUBOIS-REYMOND.) Anatomische Abtheilung, Heft i. und ii. Leipsig. 1883.—This number of the journal contains papers chiefly devoted to development. The following

is a list:—1. H. Strahl, Beiträge zur Entwickelung der Reptilien, with one plate. 2. Graf. Ferdinand Spee, Beiträge zur Entwickelungsgeschichte der früheren Stadien des Meerschweinchens bis zur vollendung der Keimblau. 3. V. Hensen, Ein frühes Stadium des im Uterus des Meerschweinchens festgewachsene Eies, with a plate. 4. A paper by the same author, entitled Bemerkungen betreffend die Mittheilungen von Selenka und Kupffer über die Entwickelung der Mause. 5. Wilhelm Roux, Beiträge zur Morphologie der functionellen Anpassung, with a plate. This article deals with the structure of a highly differentiated connective-tissue organ of the tail fin of the dolphin. 6. Wilhelm His, Ueber das Auftreten der weissen Substanz und der Wurzelfasern am Rückenmark menschlichen Embryonen, with a plate. And lastly, Jacob Heiberg, Ueber die Lehre vom Drucke der Band-scheiben des Kniegelenkes auf das untere Femurende, with a plate.

Archives de Physiologie. (MM. BROWN-SÉQUARD, CHARCOT, et VULPIAN.) No. 2, Fig. 15. 1883.—This part contains the following papers: 1. De la Neurologie, par M. L. Ranvier, with a plate. 2. Sur le Cylindrome (Épitheliome Alvéolaire avec Envahissement Myxomateux), par M. L. Malassez, with a plate. 3. Contribution à l'étude des Altérations Morphologiques des Globules Rouges, par M. G. Hayem. 4. De l'Ostéo-périostite Tuberculeuse Chronique ou Carie des Os, par MM. P. L. Kiéner et A. Poulet, with a plate. 5. Étude sur les Abcès Aréolaires du Foie, par M. A. Chauffard, with a plate.

Hospital Administration.

A SPECIAL DEPARTMENT.

YEAR by year hospitals and kindred institutions have increased and multiplied, until their number has become almost confusing. Without any general scheme, piecemeal, erratically, and at the will of the founders, benevolent and otherwise, these institutions have grown up throughout the country, have distributed an immense amount of free relief, and whilst doing great good, have undoubtedly caused, and are causing, no inconsiderable amount of mischief. Most people now agree that hospital abuse is a social evil of very great importance, and that it has by long immunity from interference acquired an impetus and force which it will be difficult to stem. Yet this mischief affects a variety of institutions, and interests the whole community. To mitigate the evil would be to do good public service. Why, then, has it been allowed to continue so long without an adequate system to counteract and prevent it? Experience seems to point for answer to the absence of general information amongst the managers of these institutions, and to the need of combination for the purpose of common instruction and common protection. Here and there successful efforts have been made to remove existing abuses, but so far such instances of success are known only to the few, and the results achieved have consequently failed to react upon the managers throughout the country. These facts have been brought to our knowledge very frequently of late, and we cannot in justice longer resist their combined force.

REQUIREMENTS OF TO-DAY.

For many years THE LANCET has dealt with the subject of hospital and asylum administration in a general way, and, in addition to leading and special articles on the subject, its columns have fairly reflected the main features of the progress made in the management of the various institutions. So far so good; but the time seems at present suitable for a still further advance—an advance, that is, from the general and irregular treatment of this important question to the establishment of a special department of hospital administration in connexion with THE LANCET, wherein the whole subject can be methodically and exhaustively treated. Unfortunately each year the pressure upon space becomes increasingly great—a fact mentioned here because it ought to be remembered by all who read these pages as convincing proof of the strong desire we evince by the establishment of a special department of hospital administration to promote the public good, and to co-operate with and to aid all those who are engaged in managing the class of institutions now under notice. It is reasonable, therefore, to hope that all who are interested in or connected with hospitals, lunatic asylums, and similar institutions in Great Britain, America, the colonies, abroad, and elsewhere will co-operate with us by sending any information concerning such establishments in their own districts, and that the managers themselves will everywhere seek and contribute information.

"OUR PROPOSAL."

It is intended at the commencement to deal with the subject fortnightly, and to lay down certain general principles of administration. Thus, the questions dealt with will include:

1. The nursing department.
2. Hospital finance, audit, and book-keeping.
3. The drainage and general hygiene.
4. The mode of construction.
5. The admission and discharge of patients.
6. The relation of the clinical hospitals to their medical schools, and of hospitals and Poor-law infirmaries generally to medical education.
7. The mode of electing physicians and surgeons.
8. The registration of diseases in hospitals and asylums.
9. The relation of the honorary medical staff to each other and to the hospital managers.
10. The governing committees and the executive staff.
11. Free and pay beds.
12. Income and expenditure.

It will be noticed in the above list lunatic asylums are mentioned. It may be well, therefore, to explain that in our belief asylums for the insane should be regarded as hospitals, and that much good will result if the public can be induced so to regard them. For this reason, amongst others, it is the intention to include lunatic asylums, and all points affecting their administration, in this new department, and we look with confidence for the cordial co-operation of the medical superintendents of large and small asylums to make this special feature a success.

ALL SHOULD CO-OPERATE.

We ask all classes of people who are interested in hospitals to co-operate with us and to combine to make this department practically useful. Philanthropists and lay governors can draw attention to points in the management of certain charities in which they are interested about which they desire information or guidance. Committees will find much assistance by availing themselves of the general information now placed at their disposal concerning all classes of medical institutions, and henceforth no hospital need be built, or new feature in the management be determined on, until the managers have obtained through this department exact information as to the experience and practice of other similar institutions on the point or points under notice. Resident officers, medical and lay, may render good service by seeking advice and counsel when they find themselves in any difficulty as to the course of action they shall adopt at various times, and they can render excellent public service by keeping us exactly informed on the progress of all questions which may be agitating the governors of the medical institutions in their own districts. Cordial co-operation of all classes is therefore invited, and we believe it will be forthcoming. Our object is not to impede, but to promote,

progress, and to secure the very best possible administration of all hospitals and kindred institutions.

A HOSPITAL CONFERENCE.

For some years past the proposal to hold an annual conference of all persons interested or engaged in the administration of the hospitals and lunatic asylums throughout the country has been growing in public favour. It is satisfactory, therefore, to be able to announce that there is reason to hope that a large and representative conference of all classes of hospital managers will be held at the Society of Arts in May next, under the auspices of the Social Science Association. Such a gathering has long been desired by those most competent to express an opinion on the subject, and its early assembly is a matter for congratulation. It will no doubt lead to much useful discussion, to the removal of many mistakes, and to the promotion of more cordial relations amongst all who are engaged in the difficult task of managing these institutions. Many are in favour of the appointment of a Royal Commission to inquire into the many questions arising out of the management of our hospitals. Whether this Commission be ultimately appointed or not, it is undoubtedly desirable that an annual conference of the representatives of all the hospitals of this country should take place, because it would possess great economical advantages, and be likely to prove useful and attractive to the charitable public, and so doubly beneficial in the end to all medical institutions. We wish the attempt of the Social Science Association all success, and congratulate them on the public spirit and enterprise they have shown by undertaking to organise and bear the expense of promoting the first Hospital Conference. It will cost no doubt a considerable sum, and the Association might well open a special fund to defray the expenses. It is intended to deal with the subjects set forth above in detail previous to the meeting of the Conference in May, and if there are any other questions which are thought important, we shall be glad to have them for discussion and consideration in this department.

HOSPITAL SUNDAY FUNDS.

We have long felt that the councils which manage the collection of this fund throughout the country might greatly add to their usefulness if they would decide to be a little more exacting in their requirements before making any grant to a hospital. For instance, the Council of the Metropolitan Hospital Sunday Fund, though requiring a return of income and expenditure to be made to it by each participating charity every year, has never yet insisted upon a public audit or the keeping of identical accounts. The paper in the March number of the *Nineteenth Century* on "Our Hospitals" contains startling evidence of the need there is for a reconsideration of the requirements of these councils before distribution. There is reason to believe that not a few of the hospitals which are notorious for the crying abuses to be found within their walls are at present in receipt of grants from the Hospital Sunday Fund. If this be true in any sense there are few who will not vote for the exercise of more care, and the demand for more exact information, before the funds collected on Hospital Sunday are distributed. There is a growing inclination on the part of the public to leave money by will to these funds, to ensure its right distribution amongst the most deserving charities. This fact emphasises the necessity for careful and exhaustive inquiry on the part of the various councils, and ensures a ready compliance on the part of the hospital managers with all reasonable demands. Much improvement might be effected if each council of every Hospital Sunday Fund will henceforth determine to send a properly qualified representative to inspect every institution that applies to it for a grant, and if it further insists upon the accounts being kept upon an identical and intelligent system. We look for the co-operation and powerful assistance of the Hospital Sunday Fund organisation everywhere; and it is surely not too much to hope that these bodies will take immediate action to secure the excellent results which are likely to ensue from the exercise of a little authority on their part.

CONCLUSION.

Healthy competition and wholesome rivalry in good works very often do much good; but the most pressing necessity of our day, if the right management of all hospitals is to be speedily accomplished, is a hearty combination of all charitable agencies for their mutual protection and advantage. This desirable result we hope to advance by the department of hospital administration we have now opened, and to secure its speedy fulfilment we desire to interest all who are engaged in the work. None should refuse to co-operate or to supply their share to the attainment of so desirable an end. Union is strength; and without desiring to secure uniformity, because we not only think it impossible, but highly objectionable also, we do hope to promote unity of purpose and of action in the common aim, which all must desire—viz., the greatest good of the greatest number.

THE MEDICAL BILL AND IRISH GRADUATES' ASSOCIATION.

A MEETING of the Council of this Association was held on Saturday, March 17th, and the following resolution was passed unanimously:—

"The humble petition of the Council of the Irish Graduates' Association sheweth,—That the Irish Graduates' Association was formed to establish a bond of union amongst those holding degrees or diplomas from Irish Universities or Corporations, for the maintenance of social intercourse, and for the promotion of professional objects. That the Irish Graduates' Association deplore the existing system of granting professional titles whereby nineteen universities and corporations are separately empowered to grant one or more qualifications entitling the possessor to be placed on the Medical Register and thereby to practise all branches of the medical profession although possibly only qualified in one. That the report of the Royal Commission on the Medical Acts has shown that the licences of these numerous authorities are obtained on most unequal terms, and in many instances notwithstanding deficient knowledge; and that an unworthy competition exists in the granting of degrees and licences. That the existing General Medical Council formed by the Medical Act of 1858 have, during twenty-five years of existence, failed to remedy these defects. That the Lord President of the Privy Council has introduced a Bill into your right honourable House entitled 'An Act for the Consolidation and Amendment of the Law relating to Medical Practitioners.' That this Bill provides for the modification of the General Medical Council by the introduction of direct representatives of the profession, and by the diminution of the direct influence of the corporations who have hitherto dominated the Council. That this Bill further provides for the compulsory combination of all the medical authorities in the formation of Boards of Examination, one in each division of the kingdom, to conduct complete examinations in medicine, surgery, and obstetrics, and that the licence of such Boards shall give the sole right to admission to the Medical Register.

"Your petitioners therefore pray that the Medical Act, 1883, may become law. And your petitioners will ever pray, &c.

"To be signed on behalf of the Council of the Irish Graduates' Association by.

E. WATERS, M.D., F.K.Q.C.P., &c., President.
R. T. DANIELL, M.B., F.R.C.S., } Hon. Secs."
W. FRAZER, M.D., L.R.C.S.I., }

AT Gateshead, a few days since, an inquest was held on a child, six years of age, whose death was caused by laudanum administered by the father in ignorance of the dangerous nature of the drug.

THE LANCET.

LONDON: SATURDAY, MARCH 31, 1883.

THE Medical Bill of the Government is the engrossing topic of interest in the profession. And well it may be. The subject of it is of the highest importance. But it is by no means a measure affecting only the profession; it profoundly affects the public. The medical profession, though the subject of much pleasant banter and satire, is in truth the profession in which the public is most deeply interested. A lawyer or even a clergyman is far more dispensable to nine people out of ten than a doctor. Most people get through their lives without the necessity of consulting members of other professions at all, or more than once. But he is a lucky man, and a still more fortunate woman or child, who goes five years without the necessity for the very best medical advice that can be got, on which future life and happiness may depend. The value of the advice to be obtained in sudden emergencies of disease depends to a terrible extent on the State, which hitherto has put its equal stamp, if all accounts be true, on documents and diplomas of very unequal value, and upon some which, in the emphatic language of the report of the Royal Commission on which the Government Bill is based, afford no guarantee that the practitioner holding it possesses a competent knowledge of medicine, surgery, and midwifery. The State clearly has here an enormous responsibility. The very least it can do is to create an Examining Board in each division of the kingdom, or a single Central Board, which shall be so constituted as to give a guarantee that a certain minimum amount of knowledge, in all branches of the profession, has been attained. The Government Bill provides such a board in each division of the kingdom, passing which will be the only condition of practice. This board is to be constructed by a body in each division called the Divisional Board, and the schemes formed by these boards are to be subject to the control and the criticism of the Medical Council in which the Crown, the Divisional Boards, and the Profession are all to be compactly represented. If outsiders think it a matter of difficulty to supervise the work of three Examining Boards, they will admit that it will be much easier than the present duty of supervising the work of nineteen. Theoretically one board would be the best arrangement. But the Government has to be practical, and so it proposes the formation of three Boards—one in England, one in Scotland, and one in Ireland,—but it makes all the existing bodies—universities and corporations alike—responsible for the character of the Board, and, yet more, it subjects their schemes, as we have said, to the approval of the Medical Council, and finally of the Privy Council. If this proposal be adhered to and the Medical Council be endowed, as is proposed, with authority to enforce its views, we shall get a control of medical education, and let us add of medical conduct—for the Bill enables the Council to erase the name of a practitioner for infamous or disgraceful conduct in a professional respect—which we have never yet had, and in getting which the poorest and the richest man in Her Majesty's dominions are alike interested. The present Medical Council is made up largely, as has often been said, of very eminent men; but they, for the most part, represent certain corporations and financial interests. So it comes to pass that prudential considerations and the consciousness of imperfect power have restrained proper criticism and proper control of inefficient or unfaithful bodies. The most eminent men, fastened to a corporation which "must live," even if it be by the sale of diplomas, are acting at a great disadvantage. In the new Medical Council the financial interests will at least not be in a majority, and they will be controlled by Crown representatives, by direct representatives of the profession, and by the new and real powers of the Council. Neither the public nor the Government will be misled by any unwise opposition of the existing boards to the changes proposed in the Government Bill. Beneficial changes have always to be thrust on reluctant bodies who would crystallise themselves into unchanging forms, no matter who suffers. The President of the College of Physicians, Sir WILLIAM JENNER, was one of the Royal Commissioners, and his unqualified assent was given to the Report on which the Government is acting, and on which every Government must act until this question is disposed of. We repeat that the public has the gravest interest in this measure, as one aiming at elevating the whole tone of medical education and behaviour, and at securing that medical competency shall mean the same thing in London, Edinburgh, and Dublin.

THE Medical Council is summoned for Thursday, the 19th of April, of course with the object of considering the Medical Bill of the Government. It will certainly meet in very grave circumstances—to discuss a Bill which proposes that the Council itself should cease and determine, and make way for another. We have no wish to anticipate the action or the resolutions of the Council. But we cannot help speculating as to the reflections of some of its leading members on the pass to which they have brought the body created by the Act of 1858. Ten years ago, and again two years ago, the smallest exercise of judgment and generosity on the part of the Council would have healed what Mr. SIMON called the schism of the profession. The concession of the right of the registered practitioners to representation in a Council which is entirely and liberally supported by their fees would have secured the passage of the Duke of RICHMOND'S Bill. But the corporation spirit was too much for the *esprit de corps*. Rather than admit a few representatives of the registered practitioners, the Bill was suffered to be wrecked. Now how altered is the situation! Hitherto Governments, in bringing in a Bill, have had to consider and consult the Medical Council, the burden of whose advice has been that they were the most eminent members of the profession, and nothing could be more satisfactory than their influence. True, it was not always effective. It did not secure efficient preliminary examinations; it did not abolish bogus fellowships; it did not discredit boards which thrive chiefly by trading on false titles, and passing candidates who fail to pass elsewhere; it left the schools unvisited, and, while piling up the severity of examinations, took no pains to make the process of education more perfect; it allowed much loose conduct on the part of unprincipled members of the

profession until members of Parliament and the Home Secretary roused the Council to a sense of its responsibility. But though not effective, the action of the Council was vaunted as pleasant and persuasive. The beauties of moral suasion were such as to compensate for imperfect education and cruel rejections at the examinations. No matter what grief students came to, so long as the examining bodies throve, and the Medical Council added to its large investments. But we shall not taunt the latter body further. The Government can no longer take the Council at its own valuation, and have to consider the evidence and report of the Royal Commission. It is quite possible that the Council may make an attempt to defeat the Government proposals. But it may well ask itself if, after the Report of the Commission, and the proposals of the Government, it would be satisfactory to exist. We have always maintained that the opposition of the Council only tended to weaken its influence, and complete the case for its destruction. Even if the Council could defeat the Government acting on the Report of a Commission, the chief dissentients from which are members of the Council to be reformed, it may well consider whether, in taking such a course, it is doing what in the long run will prove most conservative of all the interests most worthy of being regarded. Success in such a course might secure a short further tenure of existence, but it would be an existence without credit and without influence, without the power even of "moral suasion."

DR. R. KOCH seems determined to plunge into controversy. Hardly has he delivered himself of an attack upon M. PASTEUR'S methods and conclusions upon the subject of anthrax vaccination, than he feels called upon to reply to the various objections that have been raised to the import of his discovery of the bacillus tuberculosis. In the issue of the *Deutsche Medizinische Wochenschrift* for March 10th he pens a lengthy reply to each writer who has ventured to deny the specificity of the bacillus, and this without discriminating between criticism that was based on actual research and that which is almost purely theoretical. Nor is the manner of his reply to be commended, for it certainly will not conciliate. Indeed, at Vienna it has already raised a spirit of opposition, which can bode no good for the attainment of the truth. He finds opponents to his doctrine mostly in America and Germany. In the former country there is CUTLER, who regards the bacilli as the embryonal forms of the mycoderma aceti; ROLLIN GREGG, who suggests that they are really only fibrin filaments; SCHMIDT of Chicago, who believes they are fat-crystals. Such statements are so easily disproved that one wonders that KOCH takes the trouble to refer to them. More powerful opposition comes from FORMAD, who has not only declared his inability to detect the bacilli in some cases of caseous destruction of the lung, but avers that other forms of bacteria give the same result to staining reagents. He also reviews the fact of the proclivity of certain animals to tuberculosis after non-specific inoculations, being, as KOCH remarks, apparently ignorant of the work done by COHNHEIM and SALMONSON on this point. KOCH advises FORMAD to make himself acquainted with the recent literature of artificial tuberculosis, and to distinguish between spontaneous and inoculated tubercle. STRASSBURG'S failure to find bacilli puts him out of court in the denial of their existence. Turning to German opponents, he first meets BENEKE, who doubts the significance of bacilli from the fact that alcoholic and ethereal extracts of blood yield products having the reaction of the bacillus; and upon this KOCH merely recalls the fact that in 1876 a well-known botanist declared the anthrax bacillus to be merely a form of crystal. CRAMER has found in healthy stools bacilli giving the colour reactions of the tubercular bacillus, but other observers, as MENCHE and GAFFKY, have also examined these excretions in non-phthisical persons with negative results. Even granting the resemblance between such bacteria and the bacillus tuberculosis, it has yet to be shown that they possess the same pathogenic characters. KOCH says he has never denied the possibility of other bacteria having like colour-reactions to the bacillus of tubercle, but he has never met with such, the bacillus leprae excepted. He likewise throws doubts on BALOCH'S alleged discovery of similar bacilli in the slime from the Berlin drains. SCHOTTELIUS is another adversary who has lately written in support of tuberculisation by non-specific substances, disregarding the extension of tuberculosis and its infectivity, and considering that the bacilli have no etiological relation to the disease. The same writer also contends against the identity of human with bovine tuberculosis, and advances facts against the communicability of the latter to man. DETTWEIBER discriminates between phthisis and general tuberculosis, and, although he has found the bacilli largely in cases of phthisis, does not admit their causal relation. KOCH, however, gathers from his remarks that he has incompletely grasped the teachings of bacterial pathology. The last and most important observer who has thrown doubts upon the discovery of KOCH is Dr. SPINA, assistant to Professor STRICKER of Vienna, who has recently issued a *brochure* in which he goes over the whole ground covered by KOCH, the first attempt, according to the latter, in this direction. His conclusions were wholly at variance with those of KOCH, who deals very severely with him. KOCH points out that the method followed by SPINA is very defective, that he has not followed the precautions which every worker in the subject of micro-organisms must adopt if he wishes to avoid error; that consequently his "cultivations" are untrustworthy and his inoculation experiments (limited to but two rabbits) inconclusive. KOCH does not think such work, in spite of the high praise accorded to it in Vienna, should for one moment be reckoned on a level with his own experiments, conducted upon hundreds of animals, with every precaution. He goes further, and avers that SPINA shows himself to be ignorant of the methods of examination, cultivation, and inoculation of bacteria. He believes that the result of his labour will be to discredit not only the observer himself, but the institute to which he belongs, and satirically recommends him to study bacterial pathology *de novo*. From this it will be gathered that Dr. KOCH has written very warmly in defence of his facts—perhaps too warmly,—and has, moreover, not been free from a certain tone of contempt which hardly befits his position, and is less likely to advance his cause than if he had discussed the matter more temperately and judicially.

At the time of writing we learn that Professor STRICKER

has entered the list in defence of Dr. SPINA, who has worked in his laboratory for thirteen years, and is at present virtual director of the microscopical department. STRICKER desires to share the responsibility of SPINA'S publication, with the main points of which he was acquainted. He further declares that KOCH'S experiments prove nothing as to the contagiousness of tuberculosis, and refers to his own work on the subject, and the abundant testimony from observers in all parts of the world, as to the production of artificial tuberculosis by inoculations of indifferent materials. He also points out that the fact that putrefactive bacteria stain with KOCH'S reagents (a fact discovered by SPINA and vouched for by STRICKER himself), destroys the main argument advanced by KOCH in favour of the specific characters of the tubercle bacillus. Professor STRICKER'S remarks were made at the annual meeting of the leading medical society at Vienna; and he concluded by saying that SPINA is preparing a further statement, which will clearly expose the position taken by those who speak so magisterially without previously testing by experiment the work they criticise. There is thus open war between Vienna and Berlin about the tubercle bacillus.

A COMPARISON of the two Bills now before Parliament, having for their chief object, so far as the profession is concerned, the compulsory notification of infectious diseases, brings out points alike of difference and resemblance which it may be well briefly to allude to. The most important distinction is, of course, that which refers to the method of notification, and so far as it deals with this matter the Scottish may be called a model measure. The duty is laid entirely on the householder's shoulders, and thus the more miserable of the population, who do not employ medical aid in ordinary cases of infectious disease, are brought within the operation of the Act; the feeling of confidence between practitioner and patient is not interfered with, while the former is not placed in the uncomfortable and undignified position of either "informer" or "suspect." Provision is made that the medical attendant may optionally report his cases, and doubtless the conditions of this clause will be fulfilled whenever a public necessity seems to demand notification. Mr. HASTINGS' Bill throws the responsibility upon both householder and attendant, and while recognising the spirit which dictates this evident compromise, we do not hesitate to say that the method is much less satisfactory than that suggested in the Government Bill of the Lord Advocate. It is scarcely credible that, in the face of the oft-repeated resolutions of the profession on this subject, leading medical men can be got to urge this measure, as it is positively certain that both on abstract grounds and as the result of experience, a deeply rooted hostility is felt towards the method of notification there proposed.

While all this can be said, there are certain hints which the framers of the northern Bill might with advantage take from that of Mr. HASTINGS. He at least has the boldness to make his measure compulsory, and, notwithstanding the unfavourable answer of Sir CHARLES DILKE, the value of the scheme lies chiefly here. This is clearly one of those questions in which silence gives consent. To no appreciable extent has opposition to the broad question of notification been shown; and this, in the face of the earnest discussion to which some subsidiary matters have been subjected, may fairly be taken as evidence of approval. There certainly is no disposition in Scotland to object, and except that the notification clauses form part of a larger measure which we fear will be optional, there is no reason to delay the introduction of such practical means towards the saving of life.

It will be noticed that both Bills propose to deal only with what we must now consider as the more select of infectious maladies. Hitherto we imagined that death from measles was quite as serious a matter as death from scarlet fever, and we knew that the former disease was of a highly infectious nature; but in neither of these Bills do we find measles defined as an infectious disease. The Lord Advocate seems to have forgotten even cholera in his interpretation clause, and both Bills exclude measles, whooping-cough, and erysipelas. A suspicion seems present to the minds of those responsible that these diseases, or others, may occasionally obtrude themselves so disagreeably that they cannot further be neglected, and hence they insert a permissive clause to local authorities giving local powers of inclusion. But in this they forget that it is at the commencement of an epidemic when preventive measures with regard to these diseases can profitably be taken, as after such complaints are widespread in any community the necessary isolation becomes almost impossible. On the other hand, let the earlier cases be reported, and by exclusion from school and other means the spread of mischief may be prevented. Looking to the enormous mortality from measles and whooping-cough, the distinctly infectious character of each, the age of those peculiarly liable to these diseases, and their frequent ready spread by intercourse at school, it seems specially necessary to provide for an early knowledge of their existence; and the method we propose may be commended for its, perhaps undue, regard for the ratepayer's pocket—his only susceptible point when the public health is under consideration.

On the whole, these two Bills, if carefully adjusted and made more widely operative, contain the elements for the satisfactory solution of this vexed question; and, if a closer agreement on the points here reviewed could be arrived at, the prospect of their becoming law would be largely increased.

THE problem as to what is to be done towards lessening the prevalence of leprosy and mitigating the sufferings of lepers in our dependencies, appears from papers before us to have advanced a step in the Bombay Presidency. From returns furnished by the Commissioners of the several Divisions, at the instance of the Bombay Government, it appears that there are, excluding Bombay city and the district of Ratnágiri, where there is a leper hospital founded by private munificence, 9483 lepers ("black" or true leprosy). The disease prevails only to a slight extent in Sind and Kánara, to a greater extent in Gujerát and the Southern Marátha country, and is common in the Deccan and the coast districts of Thána and Kolába, reaching a maximum in Khándesh, where there are 2186 lepers, forming .177 per cent. of its population. This return, which was instigated by the application of the joint secretaries of the Sassoon Infirm Asylum at Poona for a Government leper asylum to relieve their institution and allow it to more fully carry out the object for which it was originally founded,

seems to have powerfully impressed the Government with a desire to mitigate the evil, and to act on the able and repeated suggestions of Dr. VANDYKE CARTER, that the only practical method of dealing with the matter is by the *segregation of lepers*. In short, the Governor fully recognises the desirability of establishing leper asylums in the Presidency, and as sufficient Government funds are not available, he earnestly seeks to enlist the help of private philanthropists. Meanwhile valuable observations are being made in the contagion and heredity of leprosy in countries where the conditions are more favourable than such a region as India. Popular belief has pointed all the world over and in all times to the propagation of leprosy by contagion, but the writings of DANIELLSEN and BOECK, and the reports of VIRCHOW and the English College of Physicians, seemed to show that leprosy was hereditary, but not contagious by mere contact, although it was left an open question as to inoculation through abraded skin. Since the date of these reports many have come forward to dispute the conclusions, especially with regard to contagion. Heredity has not been so much assailed, and we have in syphilis an instance that a disease may be both contagious and hereditary. HANSEN, in Norway, it is well known, has adduced strong arguments in favour of the contagiousness of the disease, but he attacked the view of its hereditariness. The inquiry, in regions where leprosy is endemic, is almost hopelessly confused by the fact that it is impossible to exclude the possible factors of contagion and the common exposure to the influence of some morbid agent. It is objected to the heredity view that the numerous statistics show a wide divergence of results as to its degree, and that the evidence of direct heredity is not strong. It is also a matter of common experience that only one or two of the children of a leper may be attacked, and these not in any regular order in the family. Then, again, in all probability children are never born with the evidences of leprosy upon them. Mr. HILLIS says that although very favourably placed for the observation, he has never seen it; yet this may be explained by the very chronic evolution of leprosy. HANSEN noted that in a district where leprosy is of recent origin, the indications of heredity are slight or absent, and that it is not until the disease has become endemic that the supposed proof is forthcoming. Lastly, MOREHEAD, as well as LEWIS and CUNINGHAM at Almora, came to the conclusion that heredity could not be a great factor in the increase of leprosy in a district, inasmuch as lepers have comparatively small families, who suffer a high rate of mortality, and, therefore, the survivors are only just numerous enough to replace their defunct progenitors.

Dr. I. E. ATKINSON published in the *Archives of Medicine* for June, 1882, the details of the case of undoubted tuberculated leprosy in a married woman, forty years of age, of German parentage, who had never left the State of Maryland. Her children and husband were healthy, and the only traceable origin was to a tuberculated leper whom she had known for two years, and who lived next door for one year. Dr. JAMES C. WHITE, of Harvard University, also recently contributed to the *American Journal of the Medical Sciences* an ably-written paper on the question of Contagion in Leprosy, in which he concludes that heredity is not the all-important factor in its propagation, though he would not exclude the possibility of its operation in individual cases, but that leprosy is communicable from man to man by direct transference, like syphilis, probably by inoculation of some of the juices and products of disintegration of the leprous foci

Annotations.

"Ne quid nimis."

ARRIVAL IN LONDON OF THE FRENCH SANITARY COMMISSION.

THE Technical Commission, appointed by the Paris Municipal Council to report on the condition and working order of the Metropolitan sewers, will arrive in London on April 2nd. They are to be received by the Metropolitan Board of Works, and every facility given them to investigate the working of our drainage system. This experience will serve as a basis of argument for the great questions on which French sanitary reformers are divided with respect to the rival principles of draining everything into the sewers, or of adopting a separate canalisation for particularly foul matter. This latter method implies the application of M. Berlier's principle of pneumatic drainage, to which we have already made allusion in these columns. We will in due course report the results of this visit, and, in the meanwhile, note, among the eminent practitioners forming part of the Commission, the following names:—Dr. Bourneville, Municipal Councillor and editor of the *Progrès Médical;* Dr. Brouardel, the able chemist to whom Paris is indebted for its new and improved Morgue; Dr. Fauvel, chief of the Sanitary Services of France; Dr. Guéneau de Mussy; Dr Loiseau; Dr. Marie Davy, chief of the Paris Observatory; Dr. Napias, Inspector of Factories and Secretary of the Society of Public Medicine and Professional Hygiene; Dr. A. Proust, Cabinet Minister during the Gambetta administration; Dr. Robinet; Dr. Worms, the eminent chemist; and Dr. Vallin, Professor of Hygiene at the Val de Grâce and editor of the *Revue d'Hygiène*. There are besides a great number of engineers, and notably M. Humblot, chief engineer of the Paris sewers; M. Durand Claye, chief engineer of the Ponts et Chaussées; M. Marchant, director of the water companies; &c. The report of such a Commission should carry great weight, and we trust that it will result in the immediate adoption of measures that will purify Paris. Considering the number of lives that are yearly sacrificed through bad ventilation, action cannot be too prompt to remove the exceptional evils which at present afflict the capital of France.

THE "NEW CODE" OF ETHICS IN AMERICA.

OUR readers will remember that at its annual meeting last summer, the American Medical Association expressed in no ambiguous fashion its dissent from the course taken by the New York State Medical Society in so altering its code of ethics as to allow its members to meet on equal professional terms any legally qualified practitioner, be he homœopath or any other of the large army of "irregulars." The conflict has been waging ever since. Other State Societies have stood to their colours, and asserted that their members should be men of honour, worthy of the traditions of their profession, and not mere money-makers. The State Society of New York recently met at Albany, and after a warm discussion, in which we are glad to see Dr. Austin Flint made a powerful speech in favour of what is by most men considered the more honourable course, a vote was taken, and the new code was affirmed by six votes. We can but lament this result. The question is evidently exciting strong feeling on the other side of the Atlantic. The victorious majority threaten to proceed even further, and

to abolish all restrictions in professional intercourse, while the minority, numbering among it the most trusted leaders of the profession, feeling that their cause are just, are quite unable to bow to the decision of the majority. Unfortunately it is boldly stated that the leaders of the advocates of the new code are entirely "specialists," and it is obvious that such a change will be likely to benefit such men pecuniarily. We cannot believe that this vote at Albany fairly expresses the opinion of the profession in the State of New York, and we trust that very soon wiser counsels will prevail and this false step will be retraced.

PRIMARY ACUTE MILIARY CARCINOSIS.

A SUFFICIENTLY searching scepticism is always necessary in medical science, and it is at no time more needed than when an attempt is made to add a new name to medical nomenclature. There are no *à priori* reasons why carcinomatous nodules should not crop up in various parts of the body under the influence of mere general conditions. It is conceivable that certain of the tissues in certain individuals may as naturally become carcinomatous as those of others fibroid, external agencies apparently having but little influence in the matter. Modern pathology, however, gives an important place to the doctrine of infection, and in the presence of the actual the mind instinctively turns from the merely conceivable. There can be no doubt that the majority of physicians would be extremely careful to exhaust every source of infection before coming to the conclusion, in any particular case of carcerous affection of the serous cavities, that they had to deal with a primary carcinosis of those structures. MM. Raymond and Brodeur diligently but unsuccessfully searched for the primary disease in the case which they have reported in *La France Médicale*. The observation was made on a man, aged seventy-six, who showed during life symptoms similar to those induced by pulmonary tuberculosis; palpation of the swollen abdomen, moreover, is said to have revealed the existence of disseminated hard nodules, varying in size from a pea to a bean, apparently separated from the observer's hands only by the thickness of the abdominal wall; there were, in addition, periodic febrile attacks simulating ague. To inspection with the naked eye, tubercles and nodules of carcinoma are sometimes wonderfully similar. The microscopical characters described in the above case were those of genuine carcinoma, growths from the pericardium, pleura, and peritoneum having essentially the same structure. There was a tumour in the liver which the authors assured themselves was nothing more than a cavernous angioma. Charcot has recorded two similar cases also occurring in old age, and, like the present one, having no hereditary taint. If the observations be true, we must recognise the existence of the disease which is called "primary acute miliary carcinosis."

MILK IN VILLAGES.

IT has been said for centuries that the nearer the church the worse the people, and in this day it may be remarked with truth the nearer the dairy the less the milk. At the present time many complaints are being made and much wonder expressed that the rural population is everywhere diminishing in this country. This is no doubt true, and the reasons are not far to seek. One is undoubtedly the want of consideration shown to the poor by employers of labour in villages, both squires and farmers. In the agricultural districts it is, as a rule, impossible for the poor to obtain milk for love or money, and in consequence the children sicken and die. The reason is that the sale of milk to the villages in small quantities gives trouble, and is not so profitable as giving it to the swine. Hence, none of the milk finds its way into the cottage, but all is given to the calves and pigs. An example of how cruelly this action of the landlords and farmers tortures the poor has recently come to light. In a small village, in three weeks, out of a population of 100 souls, three children are reported to have died from want of that nourishment which good milk can alone supply. In one of these cases the parents resided under the same roof that covered the squire's dairy, wherein was stored the milk of a large herd of cows. Not one drop was, however, allowed to be given to the suffering little one, nor in this village are the poor afforded facilities to obtain milk. In consequence the diet of these babies was found to consist of corn-flour, bread, and water, and death soon terminated their sufferings. No wonder the population in villages is decreasing. It would be a great gain if the clergy in each parish were to arrange to supply milk from the school or some other centre. The present state of things is a disgrace to our common humanity, and a remedy must speedily be found for it.

SEWAGE POLLUTION OF THE THAMES.

THE Royal Commission on the Metroplitan Sewage Discharge, which was appointed last June in deference to reiterated complaints of the foulness of the Lower Thames, will probably complete its difficult and tedious task before long. Fortunately the Commission is an excellent one. No better chairman than Lord Bramwell could have been found, and Sir Benson Maxwell has proved, as might have been expected, an efficient deputy. With Sir John Coode, Mr. Abernethy, and Colonel Ewart as engineers, and Prof. Williamson, Dr. De Chaumont, and Dr. Stevenson as chemists, we have what dramatists would call a very strong cast. The inquiry has to a certain extent a judicial character. It has resolved itself into a kind of dual between the Metropolitan Board of Works, who devised and defend the present system, and the Corporation of London who, as port sanitary authority, lead the attack on what they hold to be a foul and disgraceful nuisance. Each side is represented by counsel, and each side is doing what it considers its duty in bringing forward all the evidence it can collect. As to some of the facts there can, of course, be no dispute. The sewage of nearly all London is thrown into the Thames, between Woolwich and Greenhithe, and no one can deny that the river is fouled by the excreta of nearly four millions of people. But the Metropolitan Board, who created the present outfalls, contend that the pollution is not of a serious kind, that it is rapidly removed by natural oxidation, and that if any evil arises from the sewage pollution it is not an actual, but merely a sentimental, one. Our own view is, as our readers are well aware, very different from this. We have always held that the pouring of London sewage into the Thames is a great sanitary offence. The tides do not carry the sewage away, and the dissolved oxygen does not destroy it with sufficient rapidity to prevent the most important river of England, the busiest river of the world, from remaining charged throughout a large part of its tidal area with actual sewage matters, which foul the mud, and in hot weather engender, both in water and in mud, a stink like that of a cesspool. At present, almost all the witnesses called have been on the side of the Corporation, and have testified to the existence and causes of the nuisances. Of the scientific witnesses there were Dr. Collingridge, Medical Officer of the City, Dr. Lionel Beale, and Dr. Corfield, as physicians; Mr. Baldwin Latham, Mr. Mansergh, Mr. More, Mr. Birch, and Professor Unwin, as civil engineers; Dr. Tidy, Professor Frankland, Mr. Way, Mr. Heaton, and Professor Tuson, as chemists; Mr. Whitaker, as geologist; and Mr. Symons, as meteorologist. The evidence given by these gentlemen was extremely elaborate, and will require careful examination when the time comes. But the other side has still to

be heard, and will be represented by men of the highest scientific reputation. We prefer to reserve further remarks until we hear what Dr. Dupré, Mr. Abel, Professor Voelcker, and the rest of their colleagues have to tell us.

"CONSTIPATION" OF NERVOUS ORIGIN.

THERE are many diverse forms or causes of this malady—or abnormity of function—which it is important to recognise, but which are too commonly confounded, with the inevitable result of failure in the precise direction of remedies. The following may be noted as two or three of the commonest varieties of the trouble. For example, defect of muscular movement may be the cause of inaction of the bowels. This may be either want of peristaltic action in the small intestines or of extrusive force in the muscles concerned in the act of defecation; the location of the inertia being determinable by the character of the fæces, and the period and manner of their dejection. The characteristics of fæces recently discharged from the small intestines and rapidly passed through the large intestine are too familiar to call for description. The scybalous dejecta of long retained fæces are equally well known. The error—if error there be—which is made in practice relates to the neglect of such lessons as the characteristics of the fæces are intended to teach, in regard to the cause or form of the "constipation." We lay great stress on this matter in diarrhœa, but it is practically disregarded in constipation, whereas, if possible, the character of the dejecta is more suggestive as an indication of the place and cause of detention than as an indication of the nature and cause of excessive or too rapid discharge. It is, for obvious physiological reasons, of the highest moment to determine whether constipation be due to inactivity of the muscular coats of the intestine, or of the levator ani and accessory muscles concerned in the act of evacuation. Second, there may be, and often is, instead of inactivity, irritability of certain muscles as a cause of constipation. In a considerable proportion of cases of constipation with loaded rectum, the actual cause of the retention of the fæces is spasmodic contraction of the sphincter, which occurs the moment the levator ani begins to act. Only a little of the watery portion of the contents of the bowel escapes, the scybalous mass being retained. In cases of this class there is apt to be considerable disturbance of the pelvic viscera and other discharges while at stool. The cause of these muscular troubles is of course located in the nervous system. Sometimes the reflex excitability which should respond to the presence of fæces at particular parts of the intestinal canal is abnormally depressed, as in the constipation which arises from certain tabetic forms of spinal disease. In others the reflex irritability is unduly exalted, as in the cases of spasmodic contraction of the sphincter of which we have spoken. This increased excitability in the lower part of the cord is common, and it is generally to spasmodic irritability of the sphincter those forms of constipation are due in which the use of tobacco affords temporary relief, and seems to produce an action. As a rule it may be assumed that "habitual constipation" is an affection the cause of which must be sought in spinal exhaustion or irritability, or the two states combined. In another group of cases the cause of constipation is inactivity of the secreting glands of the intestines, from defect of innervation. We are not speaking of the cases in which the larger viscera, such as the liver, may be at fault, but of a multitude of instances in which the glandular system and apparatus of the walls of the intestinal canal are not in such a state of erectile and functional activity as to maintain the reflex excitability of the parts, and to so lubricate the contents of the canal as to pass them rapidly along its course. This is *one* of the causes of that broken earth-like type of dejecta which attends a form of constipation common among subjects of spare and shrivelled physique, who are insensitive to most external impresssions, though, perhaps, preternaturally sensitive to some special excitants. It is not within the scope of our purpose to discuss this topic in detail, but it is one to which the attention of the profession might be usefully directed. The practice of treating "habitual constipation" by cathartics is almost played out, and it is time the study of this common and most intractable affection from the standpoint of nervous origin and causation, should be seriously and earnestly undertaken.

THE MEDICAL CONGRESS AT WIESBADEN.

THE full programme of the proceedings of the German Medical Congress at Wiesbaden has been issued. On Tuesday evening, April 17th, there will be a reception. The scientific work commences on the following morning, at 10 o'clock, with an address by Professor Frerichs, and a debate on Tuberculosis, to be opened by Drs. Ruhle and Lichtheim. Papers and demonstrations will be taken in the afternoon session, and in the evening there will be a meeting for the transaction of the business of the Congress. On April 19th the subject of Diphtheria will be discussed, introduced by Drs. Gerhardt and Klebs, and other communications will be taken. In the evening a dinner will be given. On the 20th the special subject for discussion is the Abortive Treatment of Infectious Diseases, to be opened by Drs. Binz and Rossbach. On Saturday morning, the 21st, the final meeting will be held, and arrangements made for the next year's session. The following papers are promised:—On Pulmonary Surgery, by Dr. Mosler; on Certain Diseases of the Stomach, by Dr. Leube; on Examination of the Saliva in Renal Disease, by Dr. Fleischer; on Albuminuria, by Dr. Penzold; a Brief Demonstration on Certain Diseases of the Urinary Organs, by Dr. Ebstein; New Observations on Acetonuria and Diaceturia, by Dr. v. Jacksch; Dr. Ponfick on Nephritis Hæmoglobinurica; Dr. Bichat on the Best Preparations for Infant Feeding; and other communications by Drs. Kühne, Koch, Basch, Rossbach, Binz, and Seitz. It is desired that notice be given as early as possible of any proposed communications to Dr. Seitz of Wiesbaden.

QUACKS IN FORMOSA.

THE native Chinese of Formosa seem early to have learnt the value of European medicine, but this readiness of apprehension cannot be regarded as an unmitigated blessing if we consider the disclosures made by Dr. Myers in the Medical Reports for China, 1882, which relate to the appearance of quacks in Formosa. The quack trades upon some connexion, as often imaginary as real, with a European doctor, so that the Chinese are led to believe that all the knowledge of the Western physician has been imparted to them. Another specious argument used by these unprincipled persons is to the effect that they are Chinese, and therefore understand the Chinese constitution in a way foreigners never can. "Travelling from place to place the natural consequences of their criminality do not overtake them so quickly as might otherwise be the case; besides which, although the Chinese may at the moment, and without particular reference to the justice of the assertion, blame whatever medical man has last had control of a case, yet so fatalistic are their ideas in matters of this sort that the feeling of resentment soon wears off, and the incident is forgotten." The audacity of these charlatans is not one whit less than that of their congeners in the West, and even their artifices take on much the same form. One of the most necessary articles with which they equip themselves is a leaden or pewter casting closely resembling in shape the ordinary stethoscope. This is applied to everyone of their patients at that portion of

the anatomy which is stated to be affected. "Others go the length of purchasing eye instruments, which, unfortunately, they sometimes use, and midwifery and amputating cases, which, happily, so far as is known, they have hitherto contented themselves with exhibiting at stated intervals." Vaccination appears to have met with a cordial reception in Formosa, and many Chinese will pay the impostors one dollar for every male and fifty cents for every female child vaccinated. In response to this willingness "a gang of remorseless wretches, in many instances armed only with capillary tubes, which they fill with any fluid, from dirty water up to pus, have gone over the country pretending to vaccinate." Serious consequences have actually been referred to such procedures, and, notwithstanding representations made to the authorities, the evil appears to be as rampant as ever. We fear that in some respects we must be as fatalistic as the Chinese are, and regard the quack as an example of the "inevitable residue" of Herbert Spencer.

SANITATION AMONGST THE CROFTERS.

WE have been favoured by Dr. F. A. M'Ewen, of Gairloch, N.B., with the following remarks on the sanitary condition of the crofter population. They will be of exceptional interest at the present time:—

Sanitation among the crofter population of the West Highlands is still almost unknown. Now, however, that a Royal Commission has been granted to inquire into the condition and wants of these interesting people, it is to be hoped that the sanitary requirements of the West Highlands may not be forgotten or overlooked. The good effects that have followed the adoption of compulsory sanitation in England ought by this time to prove how necessary it is that the same legislation should be extended to Scotland. A large proportion of the crofters live in dwellings which are quite unfit for human habitation. In far too many instances the cattle live under the same roof with the family; they enter through the same door, and just in front of this doorway common to family and cattle is the midden and general receptacle for filth of all kinds. The water for domestic purposes is too often open to any pollution that may come in its way, being generally got from some small exposed spring not far removed from the midden or cesspool. Overcrowding is the rule; the houses, such as they are, are for the most part badly lighted; as for ventilation, there is generally sufficient of that. So long as we have only permissive sanitary legislation for the West Highlands the question of local rates will take precedence of all questions of improved sanitation. Why the owner of house property in a large town should be compelled by law either to make his houses habitable or keep them unoccupied, while the owner perhaps of a whole county in the West Highlands can let houses for families to live in, in which he himself would not risk the health of his carriage horses, seems a curious contradiction. One thing that helps to keep down the spread of dangerous infectious disease among the crofter population of the West Highlands is the mortal dread that takes possession of these people when such disease breaks out. Every house in which such disease may break out is shunned by all the neighbours and friends, so that each focus of infection is in reality an isolated hospital for infectious disease on a small scale. If the Highland crofter only had a house that a moderate sanitarian could "pass" as being fit for human habitation, it is just possible that, notwithstanding all that has been said about the laziness of the "genuine Celt," he might yet become more independent than he is at present, and strive to raise himself out of the poverty and squalid misery in which he has too long been content to remain. The very fact that the law of the land permits these people to inhabit such houses as many of them live in, is a blot upon our civilisation. But for the free air space round their dwellings and the hill breezes that blow into and through and round about them, the Highland crofters would long ago have been swept off the face of the earth by the natural consequences of a disregard for the most ordinary laws of health. Dyspepsia in its worst forms is the most common ailment in the West Highlands. In no other part of the kingdom are there so many people bedridden for years—in many cases simply owing to nervous debility and bad house accommodation. The houses in which they live are bad enough for people in good health, but when sickness comes and death, it is very sad to see the condition in which they must perforce make the best of it; and frequently these poor people die of diseases from which with ordinary care and sanitary surroundings they would easily recover. Medical practice among these people is to a great extent a sham. They are too poor to afford the necessary medical attention. They are widely scattered, and are perhaps at a great distance from the doctor's residence. When a medical man is called in he is not expected to visit his patient again unless he is sent for, and frequently the one visit is all the medical attendance that the Highland crofter gets even when for months on the bed of sickness and death.

ACUTE YELLOW ATROPHY OF THE LIVER.

ACUTE yellow atrophy is still a mysterious disease whether we regard its etiology or the nature of the morbid process. Microscopical investigations have revealed changes which may be arranged under three headings. First, swelling and destruction of the polyhedral cells; secondly, an infiltration, chiefly of small cells, in the interlobular regions, which was first described by Winiwarter; and, finally, an apparently new formation of the smallest bile-ducts in direct continuity with the pre-existing biliary passages. The latest observations of Haren Noman (in Virchow's *Archiv*) corroborate to a large extent the researches of Winiwarter, but the small-celled infiltration was not found to extend into the lobules. He describes patches of yellow and red colour which may be seen with the naked eye, and sometimes adjoin one another. The yellow areas, microscopically, exhibit swollen and granular hepatic cells, some containing small fat globules; the intervening connective tissue is much thickened and sparsely strewn with refracting nuclei and fine dots, which stain well with dyes. The red areas have a structure something like that of a cavernous angioma, a network with irregular meshes filled with red discs and a few leucocytes. It seems that a special examination for bacteria was not made, although gentian violet and other powerful staining fluids were employed. Having regard to the mysterious nature of this usually rapid disease, it is desirable that the possibility of the presence of specific organisms should be borne in mind by any future investigator.

INTERNATIONAL CONGRESS IN COLONIAL MEDICINE.

THE programme of the Medical Congress to be held at Amsterdam in September, in connexion with the approaching Colonial Exhibition, has been issued. The following subjects are arranged for discussion:—1. On Quarantine, by Dr. de Chaumont of Netley, Dr. Van Leet of Amsterdam, and Dr. du Rafael Cervera of Madrid. 2. The Special Education of Colonial Practitioners, by Col. Becking of Utrecht. 3. Colonial Hygiene, including Unhealthy Trades, &c., by Dr. de Silva Amado of Lisbon, and Dr. Van Overbeck de Meyer of Utrecht. 4. On the Modifications of Diseases, especially Infectious Diseases, in Tropical Climates, by Dr. Walther of Paris, and Dr. Norman Chevers of London. 5. On Phthisis in the Colonies and the Tropics, by Dr. Carsten of the Hague. 6. On the Treatment of Tropical Diseases in Temperate Climates, by Sir J. Fayrer and Dr J. Ewart of London, and Dr. le Roy de Méricourt of Paris.

REVACCINATION IN THE ARMY.

IN a letter addressed to the editor of *The Times*, Mr. Tebb has given it as his opinion that the compulsory revaccination practised in the Army is "one cause of the increasing difficulty which exists in obtaining recruits," and he alleges there is a "positive repugnance" to revaccination not only among recruits but throughout the Army. He does not condescend to inform us by what means he has ascertained this, and we are quite at a loss to understand how such a feeling can exist among the soldiers, as they are not vaccinated again after having had the operation performed on them as recruits. Dr. Farquharson, M.P., has called in question the accuracy of Mr. Tebb's statement, and has pointed out the real source of the difficulty in obtaining recruits, which, in his opinion, "depends almost entirely on the state of the labour market, and on the possibility of military pay competing in any degree with the current wages of the workpeople, either in town or country." He also gives the result of his practical experience on the point when he was serving in the Guards, having never met with a single case of objection to revaccination, nor heard even a murmur on the subject. We happen to know that it was adopted in the first instance in the Guards, and was subsequently extended to the Army generally in consequence of the advantage which was found to attend it in the way of increased immunity from small-pox. Mr. Tebb, in his letter, has adduced two alleged instances of serious accidents following revaccination. Of these, one is stated to have occurred in 1860 "at the Shorncliffe camp, Aldershot" (!). We have endeavoured to verify this by reference to the Army Medical Department reports for that year, and we find it therein distinctly stated that "no case has been reported in which any unpleasant result followed the practice of vaccination." The other is that of the 4th Zouaves in France in December, 1880, the circumstances of which are still under investigation, and the report, according to Mr. Tebb, "is awaited with much anxiety." The value of systematic revaccination in procuring immunity from small-pox in the Army is strikingly shown by the fact that in 1881, in India, where small-pox is widely prevalent, and the soldiers consequently often exposed to its contagion, in a European force of 58,723 men, only seventeen cases with one death occurred during the year. We concur with Dr. Farquharson in the opinion that, "if revaccination were as general among the civil population as in the Army, we might hope to stamp out a fatal, disfiguring, and quite unnecessary disease."

ERGOT OF RYE IN LOCOMOTOR ATAXY.

M. GRASSET of Montpellier has lately drawn attention to the fact that ergot of rye administered in tabes dorsalis may do more harm than good. He gives brief notes (*Progrès Médical*, 1883, No. 11) of the case of a man who was the subject of this disease, and who had become much better when he was prescribed ergot of rye in increasing doses from twenty-five centigrammes up to one gramme per day. On the second day of taking the maximum dose he became generally paralysed; the arms, which had never been attacked before, now being involved. Sensation was also much diminished. The ergot was at once left off, and he gradually lost the paralysis; but the ataxic symptoms in the lower limbs persisted. M. Grasset points out that the involvement of the posterior columns is not generally regarded as a symptom of ergotism; but Nothnagel and Rossbach mention anæsthesia and motor incoördination among the symptoms induced by moderately toxic doses of ergot of rye or sclerotic acid in animals, large doses producing a state of general paralysis; and he refers particularly to the account given by Tuczek lately on the changes in the spinal cord, particularly in the posterior columns in ergotism. Tuczek's observations were made on eighteen out of twenty-four patients admitted into the Marburg Asylum with mental disease among 500 who were attacked with ergotism. Four patients died, and examination of their spinal cords threw light upon the spinal symptoms exhibited by all the cases. These symptoms consisted in abolition of the knee-jerk (which returned in those who recovered), paræsthesia, lightning pains, anæsthesia, analgesia, ataxy, &c. The lesions found consisted in sclerosis of the posterior columns throughout the cord, in two cases extending to the medulla. The change was symmetrical, and limited to the columns of Burdach. Tuczek endeavoured to reproduce these effects in animals by the injection of ergot of rye, but failed. He found, however, that in the rabbit hypodermic injection of sclerotic acid in doses of three to four grammes produced actual ataxy. From this, and from the case he relates, Grasset thinks that ergot of rye should be most carefully administered in locomotor ataxy. In a foot note appended to the paper M. de Bourneville states that Professor Charcot very often prescribes ergot of rye in tabes, and has never observed any ill-result from it. He gives it in daily doses of twenty-five to thirty centigrammes, but not continuously, the drug being taken for four days and discontinued for two, and so on.

THE DRAINAGE OF CANNES.

THE perusal of Mr. Douglas Galton's report on the Works of Sewerage and Drainage proposed for the town of Cannes confirms the opinions we have already expressed on this subject. The local authorities, we repeat, are animated with the very best of intentions, but as yet nothing really effective has been completed. Palliative measures have at best been adopted, and the danger of further outbreaks of typhoid fever is not yet removed. Though Mr. Galton's report is dated February of the present year, it is in its most important details written in the future tense. We find innumerable and able suggestions as to what should be done, but comparatively little is said as to what has been done. Many of the grievances of which we complained last year are again denounced by Mr. Galton. The system of draining household waste water into the brooks or into wells so arranged as to enable the water to percolate into the ground is still generally practised in hotels and villas that have gardens. The tub system and the cesspool system are always in full force, and the overflow from cesspools into the sewers is mentioned as a source of serious danger. An intercepting sewer has, however, been recently constructed from the Boulevart de la Croisette to the sewer already existing on the Rue d'Antibes, together with some other works of minor importance, but nothing is as yet ready to carry out the new system of drainage. This may be described briefly as the English system of water drainage, combining small self-cleansing hardware pipe drains with large egg-shaped sewers. Should all Mr. Galton's suggestions be realised, English critics, in any case, will find small cause of complaint. The propositions are, however, so thoroughly English that it will be extremely difficult to enforce their adoption by a population who will not only fail to understand their advantage, but will, in some instances, consider them actually fraught with danger. For instance, it is urged that house drains must only measure four inches in diameter. A Frenchman, on the contrary, would prefer double the size, and consider it all the safer for being larger. Again, it is proposed to ventilate the sewers every fifty metres, but there is a very strong feeling in France against any ventilation whatsoever into the streets. Finally, and this is by far the most important difficulty, Mr. Galton very properly insists on the absolute necessity, not merely of traps, but of ventilat-

ing house drains, and cutting off any direct connexion between them and the public sewer. Nothing, in theory, can be better, only these practices are utterly unknown in France; and though English householders may be willing to carry them out, there is no indication given us as to the readiness of the French proprietors to adopt such alien practices. Till all this is done, however, Cannes cannot be said to be exempt from those special dangers which go so far to counterbalance the climatic advantages of the Riviera health resorts. Fortunately there is an abundant water-supply at Cannes, and the difficulties due to want of fall will be overcome by pumping-stations and periodical flushing. Money is also forthcoming, and there is so strong a pressure of English opinion that if an English scheme of drainage has any chance of being effectively carried out in France, Cannes is certainly one of the most suitable towns for making the experiment.

LAPAROTOMY FOR LARGE OMENTAL TUMOUR.

ABDOMINAL section was performed on the 10th inst. at the Children's Hospital, Dublin, by Mr. Lambert H. Ormsby, Surgeon to the Meath Hospital. The patient, an unmarried female, aged twenty-six, was admitted suffering from a large abdominal tumour of six years' standing. She had never been tapped. On the 10th Mr. Ormsby operated under the antiseptic spray by the usual median incision as for ovariotomy. When the abdominal cavity was opened, an enormous quantity of ascitic fluid escaped, and the tumour came into view. It was multilocular, and contained some thick fluid, but made up for the most part of brain-like semi-solid matter. The growth was not attached to the ovary or uterus, but appeared to spring from the great omentum. The pedicle was tied with two stout catgut ligatures, and cut off short. No cautery was used to the pedicle. The abdominal incision was brought together with catgut and silkworm gut sutures, and dressed with the antiseptic gauze. The tumour together with the fluid removed weighed 75 lb. The patient has progressed most favourably since the operation.

RISKS OF THE CHANNEL PASSAGE.

THE number of patients that cross the Channel to avoid the English winter is already very considerable, and will probably increase every year; it becomes, therefore, necessary to provide means of communication suited to their delicate condition. On the French side this has been done: first, by the organisation of through trains with sleeping cars running direct from Calais to Nice; and, secondly, by the construction of the Maritime Railway station, with waiting-rooms and all conveniences on the pier itself, and immediately opposite the landing-stage. A great many patients prefer the Calais route because it is less subject to interruption through stress of weather. To this reason also may perhaps be attributed the fact that, where such interruption does occur, there is no shelter provided to protect travellers from the inclemency of the elements. Theoretically, the passenger descends from the train into the steamer, and, as the southerly winds are the most frequent, their violence is generally broken by the higher terrace or esplanade. But communications are more likely to be interrupted by northerly winds, for they increase the accumulation of sand at the mouth of Calais harbour, and render egress difficult at low tide. Thus, during the recent bad weather, the 12 o'clock boat was stopped just as it was about to start by a telegram from Calais stating that it was impossible to enter the port. The passengers had to come off the boat, walk the whole length of the Admiralty pier into the town, and then return at five in the afternoon, when, the tide being more favourable, it was announced the boat would start. Through some difficulty in coaling another vessel, and because only one ship can be brought to on the southern side, the travellers were kept waiting for more than an hour on the cold wet stones of the pier. A storm of hail and snow beat in their faces, and the salt sea foam dashed over them. The numerous ladies present suffered intensely, and only those among the men who had the strength to walk up and down rapidly could hope to escape evil effects from such a trial. After waiting more than an hour the passengers at last got on board, but in spite of all this patience and suffering they had to land again. Another telegram arrived from Calais declaring the harbour to be still unsafe, and once more the travellers returned to Dover to seek what accommodation the hotels could afford for the night. The boat only crossed the next day. We need not insist on the dangers of such unexpected and, so far as the travellers are concerned, unavoidable exposure. To many patients it would be little better than a death warrant. Evidently it is the duty of the companies, in the face of the possible recurrence, however rare, of such interruptions, to build a little waiting-room on the pier, where warmth and shelter from all winds could be given, at least to delicate travellers.

THE COMBE LECTURES IN SCOTLAND.

THE annual courses of these lectures for 1882-83 have just closed. The lectures were given during the past session by the "Combe Lecturer," Dr. Andrew Wilson, F.R.S.E., in Falkirk and Perth, and the "Health Lectures," which form a supplementary course to the "Combe Lectures," were also given in Galashiels and Hawick. The utmost interest was exhibited in the lectures, large audiences being present on each occasion. The opinion of the local medical men has invariably been given in favour of the lectures, and they, as well as the clergy, have spoken of the improvement in many health items, which has taken place as a result of Dr. Wilson's ministrations. At Perth, over 1500 persons crowded the City Hall at each lecture, and at Falkirk over 1000 persons were present on each lecture night. The immense advantage derived by the masses of having expounded to them clearly and popularly the laws of health, and the general details of bodily structure and function, is readily seen.

FRACTURE OF THE PATELLA.

THERE is at present under Mr. Croly's care in the City of Dublin Hospital a case of transverse fracture of the patella in a female, due to muscular effort, the fragments being nearly one inch separated. It is a debateable point whether in these cases effusion of serum or blood takes place into the joint; but in the present instance there is no doubt, from the ecchymosis which exists, that blood, and probably serum also, have been effused. Mr. Croly is not an advocate for using any complicated apparatus in these cases, and is content to obtain good fibrous union by simply elevating the limb, so that a line drawn from the toe will pass on a level with the patient's nose, the chest and shoulders being raised by a bedrest, and subduing all inflammation by ice and evaporating lotions.

THE FUNDS OF THE NEW MEDICAL COUNCIL.

A CORRESPONDENT properly directs attention to the proposal of the Medical Bill, that to raise funds for the new Council the Medical Council shall charge, not only as at present, a fee for registration, but a fee annually for keeping the name in the Register, in return for which the registered medical practitioner is to receive a copy of the Medical Register free. This is a matter of detail worthy of attention; and we trust that, unless provision be made for a much reduced original registration fee, and the exemption of practitioners who have already paid well for registration, this annual fee will not be pressed.

DIPHTHERIA AND NEPHRITIS.

WE are still in want of observations which shall throw light on the nature of the renal changes associated with diphtheria. Our readers have been kept *au courant* with the latest writings on the subject, and are therefore fully acquainted with the doctrine of the infective nature of the nephritic alteration. It is philosophical to bear in mind that albuminuria, so often attendant on cases of diphtheria, may not necessarily be due to actual disease of the kidneys; the manifold antecedents or causes of albuminuria may still come into play, even although the body be the subject of diphtheria. The presence of one cause, however probable its action may be, does not preclude the possibility of a less striking factor being the real agent in any particular instance. We are led to make the foregoing remarks, because Dr. Fürbringer, in Virchow's *Archiv* for March, has been unable to detect the micrococci which other observers have demonstrated in the urine and kidneys of cases of diphtheria. We are far from asserting a full belief in the view that diphtheritic nephritis is even generally a bacterial disease; on the contrary, the notion that the primary diphtheritic disease is due to micrococci requires more convincing evidence than has at present been adduced. Dr. Fürbringer has investigated the clinical history and morbid anatomy of diphtheritic nephritis with much industry. He comes to the conclusion that the renal changes may conveniently be arranged under three divisions, according to the degree of anatomical change. The earlier stages are characterised by comparatively slight changes in the epithelium of the cortical region, not unlike "cloudy swelling;" next the cellular degeneration becomes more decided and more widely spread; and there are some alterations in the interstitial tissues, but no vascular lesions. The final degree is comparable with that of the intensely congested kidneys sometimes seen in connexion with nephritis after scarlet fever.

IRISH OPINION OF THE MEDICAL BILL.

THE petition of Irish graduates will be seen in another column. We gather that the Irish colleges will support the Bill, subject to the concession of amendments providing for (*a*) uniformity of curriculum, standard of examination, and examination fee for the final examination boards throughout the kingdom; (*b*) a fair division of the surplus funds according to educational work done. These bodies will also agree to a proposal of our own to substitute the direct representatives of the registered practitioners in the respective divisional boards for the representatives of the superfluous Corporations—viz., the two Apothecaries' Companies and the Glasgow Faculty. The Dublin University may oppose the Bill.

THE DEATH OF MR. JOHN BROWN.

THE death of this trusty and respected servant of the Queen will cause sincere regret to those who knew him, and it may well be taken as a warning by all who consider the circumstances under which he contracted the "cold" that brought him to an untimely end. He did not complain of feeling ill till Saturday evening last. On Sunday morning severe erysipelas appeared of the nose and cheek, which gradually spread over the whole head with a great deal of fever. On Monday he became delirious, on Tuesday afternoon coma supervened, and he died about twenty minutes to eleven on Tuesday night. He was seen from the first by Sir W. Jenner, who attended him to the last, in consultation with Dr. Reid. If any man can be held to be constitutionally armed against the perils of chill or comparatively slight exposure, this robust Highlander might have been so regarded; but the event has proved that a somewhat long drive in an open trap on a bleak day, and an hour or two spent standing about in the cold, might prove more than even his hardy frame could bear. In truth, *no* organism is naturally protected so that the depressing effects of a suddenly or persistently lowered temperature must be powerless to hinder.

The Queen is in excellent health, though greatly affected by the death of her personal attendant, who has served her so faithfully for over thirty-four years.

THE RESPIRATORY CENTRE.

IN a communication to the Société de Biologie, M. Laborde stated that he had repeated the experiment of puncture of the apex of the calamus by means of a very delicate method. Superficial irritation of this point with a needle leads in two or three minutes to arrest of respiration, the heart continuing to beat. He does not agree with the majority of writers that this effect is due to reflex action, but holds that it is direct irritation. Promising further proofs, he contented himself on that occasion with stating that division of the crura cerebri and of the pneumogastric nerves in no wise hindered the superficial puncture of the apex of the calamus from producing arrest of respiration, showing that the assumed intervention of the vagi or of the cerebrum was not necessary to the effect. Prof. Brown-Séquard, in speaking of this paper, said that in 1858 he showed that the "nœud vital" had not the importance attributed to it by Fleurens. His own experiments, extending over twenty-five years, pointed to the localisation of the respiratory centre in the grey matter at the apex of the calamus. At the same time the most potent region governing respiration was to be found at the root of the spinal accessory nerve, although the respiratory centre extends over a considerable part of the cervical cord.

POLITICAL ECONOMY AT THE POST OFFICE.

THE Professor of Political Economy at the Post Office is bent on trying some very interesting experiments on the physical economy. We have seen how he has triumphed in the matter of the female medical adviser, who will be expected to show that the female economy in no way wars against financial economy. Mr. Fawcett's answers to recent questions as to overtime, and the gas lighted apartments in which many officials of the Post Office work, do not seem to us very satisfactory. They admit substantially the truth of the suggestions we lately made. Men without being either required or requested to work overtime may easily be encouraged to do so, perhaps with some advantage to the finances of the Post Office, but with disastrous results to the *employés*.

A GREEN CANCER OF THE CHOROID.

TO most minds mere colour is a very powerful means of arresting the attention; at all events, momentarily. The medical mind is peculiarly affected by the sight of pathological objects having an unusual colour. Though there is hardly any colour which has not been seen in the products of the human economy, yet the presence of a green tint in an extraordinary situation is sufficient to set the pathologist on the search after its nature, which, despite his efforts, frequently remains obscure. Dr. Emil Bock recounts in Virchow's *Archiv* the case of a tumour of the choroid which contained biliverdin. The growth was found in a man, aged forty years, who was the subject of cancer of the liver; presumably secondary foci were detected in many parts of the body: arachnoid, lungs, and subcutaneous tissues. A plate is given illustrating the characters of the ocular growth, which was composed of polygonal cells with large round nuclei, the streaks and dots of biliverdin pigment being richly scattered in an intercellular situation.

COATING PILLS.

PRESCRIBERS who order pills to be coated would do well to try the experiment of dissolving a pill in a bag of slightly acidulated fluid at the temperature of nearly 100° F., and even frequently agitated. In a majority of instances it will be found that the mass is barely approached by the fluid after many hours, and does not actually break down until a very considerable period has elapsed. The obvious inference from these results must be that pills coated with gold, silver, and even mastich—unless quite recent—are not brought into a condition in which the drugs of which they are composed could be appropriated by the stomach until long after the time of administration. Again, and this is very important, it may happen that before one pill is dissolved, another may be reduced, and thus two doses of a potent drug may be possibly taken at once.

BURIAL.

THERE can, we think, be no question that the practice of burial, in the ordinary sense, must survive the impracticable device of cremation. Burning the dead is a simply revolting and socially unsafe procedure. It offends the feeling of human respect, and it would open the way for the commission of the worst crimes. Murder by poison would, in fact, be a perfectly facile way of "removing" enemies or victims if cremation were legalised. The law cannot sanction this mode of disposal of the dead, and, obviously, no man should allow the body of a friend or relative to be cremated unless the law of the land in which he lives and the State of which he is a subject permits the practice.

THE METROPOLITAN DISPENSARY MOVEMENT.

THIS movement will not succeed until its promoters satisfy the medical profession on two or three points. First, that they will let alone existing provident arrangements and benefit societies; secondly, that they do not open their doors to all comers, but to people who really cannot afford to pay the ordinary charges of medical men; thirdly, that they will aim at some decent remuneration of medical officers. Some of the provincial dispensary societies from which the Metropolitan Dispensary Association has taken hints, have degraded medical service by the terms of payment.

CONVALESCENTS FROM SCARLET FEVER.

MISS WARDELL, whose benevolence in regard to the best arrangements for convalescents from scarlet fever is universally admitted, announces in a letter to *The Times* that her committee has purchased an unfinished house at Brockley-hill, near Stanmore, for her great purpose. Four thousand pounds are urgently needed to complete the building; and, above all, to give it a complete and isolated system of drainage which will prevent it becoming a source of danger to the neighbourhood. We wish Miss Wardell every success in her great undertaking.

THE ANTIQUITY OF SYPHILIS.

THE very curious and interesting question of the origin of syphilis is one which has been keenly argued by many authorities. Perhaps the majority incline to the belief that syphilis was introduced into Europe, or originated there *de novo*, towards the end of the fifteenth century. Dr. Scheube (in Virchow's *Archiv*) contends for the antiquity of the disease. He founds his contention on the existence of a medical work of Japanese origin, written in the beginning of the ninth century. If we may trust the interpretation of the translation of that work, it would certainly seem that these ancient Japanese were sometimes the victims of a venereal disease, not one whit less loathsome or less searching than syphilis. But having gone so far, we may well ask—Was it syphilis? Was it the same disease with the dire effects of which we are still too familiar? And questions might be postulated without number, and without our ever being able to get any nearer to the truth.

AMPUTATION BY THE "COAT-SLEEVE" METHOD.

MR. KENDAL FRANKS, of the Adelaide Hospital, Dublin, on the 15th inst. removed the thigh, about the middle third, of a girl, aged seventeen, who was suffering from abscess of the knee-joint and necrosis of the tibia, by this method. A circular incision having been made through the skin and fascia, the part was dissected back for three or four inches, and, an incision having been made through the muscles down to the bone, the latter was sawn. The circular skin flap being brought down, was tied below the stump with a piece of tape, and two drainage-tubes left in the centre. The result so far is satisfactory, the patient going on favourably.

MR. MUNDELLA.

WE are glad to be able to record the gradual improvement in the health of Mr. Mundella. The attack through which he is passing has been attended with much suffering and great exhaustion, but the patient is now slowly recovering.

LIGATURE OF THE INNOMINATE.

MR. MITCHELL BANKS tied the innominate artery on Feb. 28th at the Liverpool Royal Infirmary for aneurism of the second portion of the subclavian. A ligature was also placed on the common carotid. Mr. Girdlestone's kangaroo tendons were used with strict antiseptic precautions. The patient recovered rapidly from the operation, and has already left the infirmary, with his aneurism much improved. Mr. Banks will doubtless furnish the profession with full particulars of this case.

IT appears from the general remarks by Colonel Bolton upon the quality of the water supplied by the metropolitan water companies during February that the state of the water in the Thames at Hampton, Molesey, and Sunbury (where the intakes of the West Middlesex, Grand Junction, Southwark and Vauxhall, Lambeth, Chelsea, and East London Companies are situated) was bad in quality during the whole of the month, the river being much polluted by the effluent waters bringing down from the land large quantities of marl and clay, as well as decayed vegetation and other impurities, which stained the water and rendered it exceedingly turbid. Messrs. Crookes, Odling, and Tidy, in their general report for the month, say: "The proportion of organic matter found in the water has continued to be much the same as that observed during the previous month, although the maximum amount found in one particular sample taken in January has not since been met with."

IN his report for the past month, Dr. Simpson, the medical officer of health for the City of Aberdeen, gives an instance of the way in which infectious disease is spread. A girl suffering from typhus fever was sent from Dundee to Aberdeen in a third-class railway carriage. The passengers in the same compartment, seeing how ill the girl was, kept the windows closed to exclude the cold air, and thus placed themselves in the most favourable position for contracting the disease, from which their fellow-traveller was, unknow to them, suffering.

DR. MACNAUGHTON JONES has been presented by the students and graduates of Queen's College, Cork, with a clock and an address as a token of regret at the severance of his connexion with the college; by the citizens of Cork with a clock, claret jug, salver, and address as a testimony to the respect in which he is held by all classes of the population; and with an address by the Cork Medical and Surgical Association. The members of this Association have united with those of the South of Ireland branch of the British Medical Association in presenting Dr. Jones with a full-sized oil portrait of himself, by Mr. Brennan.

DR. ANGUS FRASER has been delivering a course of eight Ambulance Lectures to the 1st Aberdeen Rifle Volunteers, which has been very numerously attended. To aid his pupils, he has distributed among his class a lithographed pamphlet containing an excellent summary of the course of lectures, with one hundred illustrations of the skeleton, position of the bloodvessels and viscera, modes of arresting hæmorrhage, temporarily setting fractures, carrying injured persons, &c.

THE price settled by the Local Government Board—viz., £50,000—to be paid to the managers of the Central London Sick Asylum for the Highgate Infirmary, with all its fittings and furniture, has been agreed to by the St. Pancras guardians. With reference to the accommodation at the workhouse, it was decided to send a communication to the Local Government Board to the effect that the guardians do not think it necessary to take the additional land which it had been proposed to take.

THE death is announced of Mr. Nathaniel Montefiore, of Portman-square, aged sixty-three. The deceased gentleman was the founder of the Montefiore Frizes at Netley in 1881, for which he gave a sum of £2000, to be competed for in the Military Surgery class at the School. Mr. Montefiore was an articled pupil of the late Mr. Aston Key at Guy's Hospital. He became a Member of the College of Surgeons in 1842, and a Fellow in 1858.

AT the last meeting of the Court of Governors of Guy's Hospital, Dr. Galabin was elected Obstetric Physician (in the place of Dr. Braxton Hicks, who has retired) and Dr. P. Horrocks was elected Assistant Obstetric Physician to the Hospital.

IT is expected that the Bill for the better endowment of the Scottish Universities will be immediately introduced to the House of Commons by the Lord Advocate on the part of the Government.

PROFESSOR BELL PETTIGREW, F.R.S., of the University of St. Andrews, has been unanimously elected Examiner in Anatomy in the University of Glasgow.

ST. JOHN AMBULANCE ASSOCIATION.—The Metropolitan Fire Brigade classes at Southwark underwent examination on the 15th inst. by Surgeon-Major George Evatt, A.M.D, and Mr. S. Osborn, F.R.C.S. Captain Shaw, and the principal officers of the brigade, together with most of the men, passing a highly successful examination, only five failing of the fifty who presented themselves.

MILE-END INFIRMARY.—The total cost of this infirmary, which has been recently opened, is £40,000, and accommodation is provided for 450 patients. The wards are large and well ventilated, and in the planning and construction of the drains full advantage has been taken of the recent advances in sanitary science. It was stated at the opening ceremony that 400 persons were ready for admission, so that the accommodation provided cannot be deemed excessive.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT

REPORTS OF INSPECTORS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Diphtheria at Coggeshall, by Dr. AIRY.[1]—The outbreak in question is, in its early stages, enveloped in a good deal of mystery, cases of sore-throat and of so-called "croup" complicating the history. Between September 10th and December 13th, 1882, there were, however, 68 cases and at least 5 deaths. Up to November 4th all the known infected families belonged to those who sent children to the church schools. It is true that these schools take about twice as many scholars as all the other schools put together; but when we find almost all the sickness in these, and none in the rest, it can hardly be doubted that the spread of the sickness must be due to something connected with these church schools. Acting on this supposition, Dr. Abbott, the medical officer of health, secured the closing of the church schools, and a distinct abatement was the result, although some fresh cases occurred. After seventeen days of closure, the church schools were reopened on November 20th on the authority of the school managers, who did not consult the sanitary authority. Several fresh cases soon occurred; the infection spread to families of children attending the chapel school and two deaths took place. Both sets of schools were then closed. With regard to the church schools, it was found that the well was liable to pollution, and, on its contents being submitted to chemical analysis, the water was declared to be unfit for use. But if this water were the vehicle by means of which the diphtheria contagium was conveyed, then the incidence of the disease should have been especially on those children who, staying at school during the dinner hour, had special opportunity for drinking it. Dr. Airy found, however, that whereas the attacks from diphtheria amongst this class of children were at the rate of from 6 to 7 per cent., they were at the rate of 8 per cent. amongst those children who went home to dinner. The other sanitary circumstances, both of the schools and of the village, were investigated; but neither these nor any special food supply could be identified as a cause of the disease. The infection was probably at the onset imported from another village called Tilkey; it was communicated to children attending the church schools, and by them it was conveyed in the main to their fellow-pupils. Coggeshall has a long history of diphtheria. In the autumn of 1875 an extensive outbreak commenced, which was investigated and reported on by Dr. Thorne Thorne; in 1876, 16 deaths were registered from this cause, and 5 more followed in 1877. Then followed an interval broken only by a single death until the outbreak under consideration. The Witham Union, to which Cogge-hall formerly belonged, has had a diphtheria death-rate of about 2·7 per 10,000, and Chelmsford one of nearly 3 per 10,000; whereas the neighbouring Rochford Union has only suffered at the rate of 0·8 per 10,000. Both the Chelmsford and the Witham Unions consist largely of alluvial meadows liable to floods, flanked by slopes of London clay and boulder clay, and it is possible, as regards the Coggeshall outbreak, that the nature of the locality, the wetness of the season in the autumn of 1882, and the impaired health of children who were largely suffering from poverty, produced a concurrence of predisposing causes. Had the early cases been isolated, the spread of the disease would probably have been stayed; but a hospital, which was erected in 1876, when both diphtheria and enteric fever were prevalent there, had been pulled down, and no means of isolation were hence available.

Diphtheria at Devonport, by Dr. PARSONS.[1]—This outbreak, which was investigated by the Local Government Board at the special request of the Town Council of Devonport, related to thirty-one attacks of diphtheria, of which five proved fatal, occurring in eighteen households. The outbreak, which we noticed at the time, attracted attention mainly because it had attacked

[1] Sold by Knight and Co., Fleet-street, E.C.; Shaw and Sons, Fetter lane; Hadden, Best, and Co., Strand; and P. S. King, King-street, Westminster.

persons in a good social position; indeed, almost all the patients were members of the families of officers of the Army and the Navy, no case being known to have occurred among the large working-class population. The borough having been all but or entirely free from diphtheria, the disease commenced about November 11th, 1882, and it continued until the close of the year, and with the exception of two early cases occurring in November, and apparently imported, the thirty-one attacks took place in December, and form one continuous epidemic. The houses in which the disease occurred are of the better class, mostly in elevated and open situations; in few was there any obvious nuisance, and the unventilated condition of the house drains, a defect not specially attaching to these houses above others, seemed to constitute the gravest sanitary fault detected. The greater number of the persons affected with diphtheria had, however, obtained their milk-supply from one particular dairy. But this dairy supplied some 500 families, including those who fetch their milk at the shop, and thus the number attacked with diphtheria formed but a small proportion of the whole. At the same time other dairies do a large business in Devonport and Stoke, and their customers appear to have escaped altogether; indeed, all parts not supplied from the special dairy had an immunity from the disease. The farm from which the milk is derived, as also all the cows and the families of the dairy labourers, were examined, but with the exception of a suspicious water-supply, used only for the washing of carts, nothing noteworthy was elicited. At the shop in the town the dairyman's household were said to have been in good health, but next door there had been a case of diphtheria early in December. And not only so, but the cans were washed in a little washhouse which communicated with a watercloset, and benzoline on being poured into the drain at the neighbouring house, where the case of diphtheria had prevailed, was detected at this watercloset. Near this spot the cloths used for wiping out the cans were hung up. This history gives strong reason for suspecting the milk service as being connected with the diphtheria, but it does not do more, and it can hardly be regarded as proving it. The limited amount of the diphtheria compared with the number of the milk-vendor's customers may admit of explanation, for it was only the remnant of the milk which had not been sold by the milk distributors, and that which was set for cream, which came to the shop. So also, it may only have been occasional damp cloths used in wiping the cans that were exposed to drain emanations containing the infection of the diphtheria. Dr. Parsons observes in conclusion, that many of the persons attacked by diphtheria were constitutionally liable to sore-throat, and he adds that it seems reasonable to suppose that a chronic ulceration of the throat, a ragged tonsil, or an enlarged mucous follicle, would afford more lodgment to infective material, and a fitter soil for its development, than a healthy and unbroken mucous membrane. This view, however, takes it for granted that the contagium of diphtheria is taken up into the system in the vicinity of the fauces. To the report is appended a lithographic plan of the milk-vendor's shop, &c., and of the adjoining premises, where the early case of diphtheria occurred.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Halifax Combined District.—Dr. Britton, in his annual report to the combined sanitary authorities of the Halifax Union, explains in a preface that, since he has several times been quoted as agreeing with a statement of Mr. Makuna's that "as at present carried out vaccination is an abomination," the only ground for agreement on his part lies in the fact that he believes the operation to be very generally most inefficiently performed. The district over which Dr. Britton has control includes the Halifax rural, and as many as seventeen urban districts, each one of which is dealt with separately in the report. In the Shelf urban district an outbreak of enteric fever occurred, the disease following on some undefined illness at a farm where milk was supplied. The incidence of the disease was solely upon persons receiving milk from this farm, and the infection was probably communicated to the milk by means of an open grate over a drain inlet in the place where the milk cans were kept. The well-water was, however, also contaminated, and other gross sanitary defects were discovered. Numerous other minor outbreaks of such diseases as diphtheria and enteric fever in the various districts are described, together with the remedial measures adopted. Substantial progress is evidently being made in many important respects, such as water-supply, disconnexion of drains, &c., and the record of them will be highly useful in the localities concerned. Statistical tables are appended to the report, which affords an exhaustive summary of the sanitary circumstances and requirements of a wide and important district.

Stretford (Urban).—This urban sanitary district is coextensive with the township of the same name, and is situated on the confines of the city of Manchester. The population of this district increased from 11,945 in 1871, to 19,025 in 1881, and is now estimated by its medical officer of health (Mr. G. M. Pettinger) at 20,000. As is usually the case in districts around large towns, it is evident that the constitution of the population and other conditions are somewhat abnormal, owing probably in part to the inclusion of a large proportion of domestic servants. The mean birth-rate of the district in the five years ending 1882 is reported to have been 28·2, and the death-rate in the same period only 15·2, per 1000 of the population; the rates in 1882 were 27·8 and 14·8 respectively. The death-rate from zymotic diseases, which had been equal to 3·65 in 1880, and 1·25 in 1881, was 1·95 in 1882. These figures afford satisfactory evidence of a continuance during last year of the low death-rate from this class of diseases that prevailed in 1881. The most unsatisfactory feature in connexion with these diseases is the occurrence of 8 deaths from enteric fever. Why does Mr. Pettinger refer to them as 6 from typhoid fever and 2 from enteric fever, thus encouraging a popular error, that these names signify different diseases? Two non-fatal cases of small-pox occurred during the year, which, in spite of objections to removal to hospital, led to no further cases. The execution of a new drainage scheme in the district is reported to have been commenced. We would suggest that in future annual reports it would be useful, on account of the abnormal age constitution of the population of the district, if the death-rate at groups of ages were given, especially the rate of children under five years of age. Such rates, however, should be calculated upon the numbers estimated to be living at each group of ages. Mr. Pettinger's statement that the death-rate of children under five years was 5·65 per 1000 in 1882, meaning, we presume, per 1000 living at all ages, is valueless for comparative purposes.

Stroud (Urban).—In this sanitary district the death-rate for 1882 has been high—namely, 23·8 per 1000 living, and the infantile mortality has led to a death-rate of 14·5 under one year of age for every 100 births registered. Having regard to the character and population of Stroud, these death-rates demand serious attention. Judging from Mr. Partridge's remarks we gather that the sanitary authority either have no proper bye-laws regulating house construction, or else have no person to see that such bye-laws are duly enforced. There is also a good supply of water, but it is not used as it should be in substitution of supplies from local wells.

Stroud (Rural).—In this district, with a population of some 29,000, the death-rate at all ages has been 15·4 per 1000, and that of infants under one year of age 10·3 per cent. of the births registered. As in the urban district, the construction of new houses is not under sufficient regulation. This is especially the case as regards closets; and with a view of meeting the difficulty to some extent, Mr. Partridge has designed a new form of cesspit privy. That this will constitute an improvement upon the existing form of closet accommodation we do not doubt, but at the same time it is distinctly faulty in principle. The combination of a cesspit and a privy is wrong, and where a water-supply is not available for closets either a dry form of excrement disposal, such as the ash-closet or the earth-closets, should be substituted, or else pail closets should be provided. The storage of liquid excretal matter in a closet for more than one or two days is objectionable, and hence it is that the floor of the privy-pit is now always required to be at least several inches above the level of the surrounding ground, instead of below it, as recommended in this district. A glance at the description given as to the several parishes in this rural district shows that much improvement is needed, but it is also evident that progress is steadily being made in this direction. The dairies are also under Mr. Partridge's inspection, and many faulty sanitary arrangements have been, and are being, dealt with.

Kettering.—The death-rate, which in this urban district was only 14 per 1000 in 1881, amounted to 18 per 1000 last year, measles being the principal zymotic disease which was fatally prevalent. The mortality which occurs among young children, the offspring of factory hands, is large, and

Mr. Dryland, the medical officer of health, sees no means of diminishing it except by the establishment of day-nurseries. Amongst the measures calculated to promote health, we note that a swimming-bath has been established in the town, and its use has been wisely placed within the reach of all classes of the community. The disconnexion of a series of house drains hitherto in direct communication with the sewers is supposed to have removed the last of such defects existing in the town. If this be so, Kettering, with a universal system of proper house drainage, a constant service of water, and a hospital for infectious diseases, may fairly be regarded as having high claims to the maintenance of health in its inhabitants.

Billericay.—This rural district has a needlessly high death-rate—namely, 20·2 per thousand persons living, and no less than 18·2 per cent. of the total deaths registered in 1882 were due to one or other of the so-called zymotic diseases. One person, who is recorded as having died of enteric fever, is stated to have worked on a sewage farm, but no evidence is forthcoming to show that the disease was brought about by his occupation; and in view of previous experience we can hardly assign the malady to that source, unless the farm be mismanaged. Dr. Carter in his report states that he is not opposed to the compulsory notification of infectious disease by the medical attendant, but he would not let the householder escape his responsibility in the matter. He next refers to the need for some suitable accommodation for the vagrant population, who reach Brentford at the rate of about fifty per night, and he also urges the need for improvement in the cottage accommodation of the poorer classes. The district in question has, we doubt not, need for sound advice in such matters, for it has not the reputation of having made any great strides in matters calculated to improve the public health.

Belfast.—During the four weeks ending Feb. 24th, the total births registered amounted to 551, and the deaths to 573, or at a rate of 35 per 1000. Of the 96 fatal cases of zymotic diseases, 3 were due to small-pox, 28 to whooping-cough, and 37 to scarlet fever. Phthisis caused 81 deaths, and diseases of the respiratory organs 172, or a total of 253 from lung affections. The deaths from scarlatina and whooping-cough were above the average; but the low death-rate of typhus and enteric fever is satisfactory. Dr. Browne states that the atmospheric changes in the first three weeks of February have been remarkable, as indicated by the rapid rise and fall of temperature within a few hours, and the great barometrical fluctuations, with excess of moisture, have largely determined the excess in disease and mortality which has occurred during the past month.

Cork.—During the four weeks ending February 24th, the births registered numbered 168, and the deaths 150. The death-rate was equal to a mortality of 25·0, but deducting 31 deaths which took place in the workhouse, and are not chargeable to the city, the urban rate was equal to 19 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5379 births and 4304 deaths were registered during the week ending the 24th inst. The annual death-rate in these towns, which had steadily increased in the four preceding weeks from 21·9 to 26·0 per 1000, further rose last week to 26·1. During the first twelve weeks of the current quarter, however, the death-rate in these towns averaged only 23·3 per 1000, against 25·6, 24·0, and 24·8 in the corresponding periods of the three years 1880–1–2. The lowest rates in these towns last week were 18·9 in Derby, 19·9 in Bradford, and 20·5 in Salford. The rates in the other towns ranged upwards to 31·2 in Birkenhead, 32·0 in Norwich, and 32·9 in Hull. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 327 and 399 in the two previous weeks, were 348 last week; of these 99 resulted from whooping-cough, 55 from measles, 81 from scarlet fever, 47 from "fever" (principally enteric), 37 from diarrhœa, 21 from diphtheria, and 8 from small-pox. No deaths from any of these zymotic diseases were recorded either in Derby or in Huddersfield, whereas they caused the highest rates in Blackburn and Hull. Whooping-cough was proportionally most fatal in Bolton and Hull; measles in Norwich; scarlet fever in Sheffield and Leeds; and fever" in Birkenhead, Cardiff, and Sunderland. The 21 deaths from diphtheria in the twenty-eight towns included 14 in London and 2 in Portsmouth. Small-pox caused 4 deaths in Newcastle-upon-Tyne, 3 in London and one in Leeds. The number of small-pox patients in the metropolitan asylum hospitals, which had been 97 and 94 on the two preceding Saturdays, was 93 at the end of last week; 13 new cases of small-pox were admitted to these hospitals during last week, corresponding with the number in the previous week. The deaths referred to the diseases of the respiratory organs in London, which had been 395 and 548 in the two preceding weeks, further rose to 598 last week, and exceeded the corrected average by 95. The causes of 126, or 2·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Birmingham, and in seven other smaller towns. The proportions of uncertified deaths were largest in Wolverhampton, Oldham, Preston, and Halifax.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 25·1, 26·4, and 28·8 per 1000 in the three preceding weeks, was 28·4 in the week ending the 24th inst.; this rate exceeded by 2·3 the mean rate last week in the twenty-eight English towns. The rates in the Scotch towns ranged from 12·4 in Aberdeen to 36·2 in Glasgow. The deaths in the eight towns included 130 which were referred to the principal zymotic diseases, showing an increase upon recent weekly numbers; these deaths were equal to an annual rate of 5·5 per 1000, which was no less than 3·4 above the mean rate from the same diseases in the large English towns. The 53 deaths from whooping-cough were within four of the high number in the previous week, and included 27 in Glasgow and 14 in Dundee. All the 19 fatal cases of measles, and 10 of the deaths referred to "fever," were returned in Glasgow, in which town the death-rate from zymotic diseases was so high as 8·1 per 1000. The deaths from diphtheria were again excessive, and included 10 in Glasgow, 4 in Dundee, and 3 in Edinburgh. The 14 fatal cases of scarlet fever, of which 8 occurred in Glasgow and 3 in Leith, exceeded the numbers in recent weeks. The 12 deaths attributed to diarrhœa were below the average. The deaths from acute diseases of the lungs in the eight towns were 165, and exceeded by 49 the number returned in the corresponding week of last year. The causes of 123, or more than 18 per cent., of the deaths registered in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 35·5 and 35·4 per 1000 in the two preceding weeks, further rose to 40·4 in the week ending the 24th inst., and exceeded the rate that prevailed in any previous week of the year. During the first twelve weeks of the current quarter the death-rate in the city averaged no less than 34·5 per 1000, against 21·6 in London and 21·1 in Edinburgh. The 271 deaths in Dublin last week showed an increase of 34 upon the number returned in the previous week, and included 12 from "fever," 11 from whooping-cough, 7 from diarrhœa, 1 from measles, and not one either from small-pox, scarlet fever, or diphtheria. Thus 31 deaths were referred to the principal zymotic diseases, against 22 in each of the two previous weeks. They were equal to an annual rate of 4·6 per 1000, against but 2·0 and 1·8 from the same diseases in London and Edinburgh. The fatal cases of whooping-cough, which had been 12 and 14 in the two previous weeks, declined to 11 last week, whereas the 12 deaths referred to "fever" showed a considerable increase upon recent weekly numbers. The deaths attributed to diarrhœa also exceeded the average for the season. The causes of 37, or more than 13 per cent., of the deaths registered during the week were not certified.

FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—The Dr. James Watson Prize, of the value of £50, has been adjudicated to Dr. William MacEwen, surgeon to the Glasgow Royal Infirmary. The subject was on this occasion surgical; and the title of Dr. MacEwen's essay is "On Experimental Inquiry into the most Suitable and most Reliable Material for the Ligature of Arteries and for Sutures." The competition was open to Fellows and Licentiates of the Faculty.

INDIAN HEALTH STATISTICS.

No. II.

Eighteenth Annual Report of the Sanitary Commissioner with the Government of India, 1881. With Appendices and Returns.

THE total strength of the Native Army of India in 1881 was 133,453, but the average number of men constantly present with their corps was only 114,613. The admissions into hospital were 149,566 and the average constantly sick was 5288. These numbers give the proportion of 1305 admissions and 46·1 daily sick per 1000 present. The deaths amounted to 3019, including 814 of men absent from their corps, being in the ratio of 22·62 per 1000 of total strength. These are all under the ratios of the two preceding years, but above the previous average. Compared with the European troops, they show a lower rate of admissions and constantly sick, but a higher death-rate. The sickness and mortality were distributed in the different portions of the force as follows:—

	Ratio per 1000 of strength.		
	Admissions.	Total deaths.	Constantly sick.
Regular Army of Bengal	1494	27·73	51·8
Army of Madras	907	16·75	40·3
Army of Bombay	1471	25·93	50·2
Central India Irregular Force	815	13·34	26·0
Punjaub Frontier Field Force	1718	22·64	54·9
Hyderabad Contingent	673	8·52	23·8

The ratios of sickness and mortality in Bengal and Bombay were much higher than in Madras, but this excess in the case of Bombay has been almost entirely due to the very unhealthy condition of that portion of the force, amounting to 6596 men, which was employed in Southern Afghanistan. If this be deducted, the admissions and deaths from all causes furnished by the rest of the troops in Bombay would be only 1166 and 15·58 per 1000, the latter being slightly under the proportion in Madras. A corresponding correction for Bengal would not affect the ratio of admissions, but would reduce that of the deaths to 24·69 per 1000, or one-half higher than in Madras and Bombay. Fevers were the most prevalent diseases in all the Presidencies, giving rise to rather more than half the admissions into hospital in Bengal, and to nearly half in Madras and Bombay. Respiratory diseases were the cause of the highest rate of mortality in Bengal and Bombay, the ratio of deaths in the former having amounted to 6·59, and in the latter to 3·32, exclusive of the troops in Afghanistan, while in Madras it was only 1·37 per 1000. Among the Bengal native troops in Southern Afghanistan, this class of disease gave rise to 30·14, and in the Bombay native force to 33·05 deaths, per 1000. Next in order among fatal diseases rank fevers, by which the deaths were, in Bengal, 3·12; Madras, 1·79; and Bombay, 2·76; in Afghanistan, in the Bengal force, 13·15; and in the Bombay, 5·15 per 1000. Dysentery and diarrhœa account for 2·74 per 1000 in Bengal, 1·46 in Madras, and 1·37 in Bombay; the Bengal troops in Afghanistan furnish the very high ratio of 31·23, and the Bombay troops 7·41, per 1000. Cholera did not prevail generally as an epidemic throughout India among the native troops, but it did so at Bhagalpore in November and December; Dinapore, from June till August; Surat, in May; Bombay, June till August; Kamptee, August and September; and Trichinopoly, November and December.

The causes of the comparative healthiness of the Madras troops, of the low death-rate among them from diseases of the respiratory system and fevers, and of the very high death-rate among the native troops serving in Afghanistan, are questions of great interest, but unfortunately no information is given upon these points in the report. The low rates of sickness and mortality in the Central India regiments and the Hyderabad Contingent are also deserving of notice.

The gaol population of India in 1881 averaged 100,844, among whom the admissions into hospital were 1214, the deaths 44·03, and the constantly sick 44·9 per 1000. The admissions and mean sick were therefore slightly below, but the mortality double that of the native troops. The results for each of the Presidencies were as follows:—

	Aver. strength.	Ratio per 1000 of average strength. Admitted.	Died.	Constantly sick.
Bengal	63,478	1151	44·42	40·8
Madras	10,332	737	41·91	28·2
Bombay	9,910	1076	41·88	33·7

This shows that, as in the case of the native troops, the sickness and mortality were higher in Bengal than in either of the other Presidencies. High as the death-rate has been, it was lower than in any of the three preceding years, though higher than in any of the five, 1872-76. The range of the death-rate in the different prisons is very remarkable (omitting all gaols with an average strength under 100): in Bengal it ranged between 2·93 per 1000 at Shahpur and 277·78 at Jalpaiguri; in Madras between 5·21 at Palamcottah and 165·52 at Tanjore; and in Bombay between 3·94 at Dhulia and 138·76 at Surat. The mortality exceeded 10 per cent. in 17 out of 159 gaols in Bengal, in 2 out of 31 in Madras, and in 2 out of 32 in Bombay. The diseases which have proved the greatest source of mortality in the gaols have been dysentery and diarrhœa, the deaths by which amounted to 16·92 per 1000; diseases of the respiratory system were the cause of 6·34, fevers of 4·52, and cholera of 3·03. The death-rate by dysentery and diarrhœa was highest in Madras; but that by fevers was only ·77 per 1000 in it. At Thayetmyo, in British Burmah, 50 deaths occurred in an average strength of 400 from beri-beri. This disease prevailed in the gaol from July to October, and was at length checked only by the release of a number of the prisoners and the removal of the remainder to Moulmein. "The etiology of the disease is at present but little understood. ..... Two facts in connexion with beri-beri may be held to have been established:—(1) That a complete change of air forms the only known method of checking the disease; and (2) that the disease is not contagious." Cholera prevailed to a considerable extent in 11 gaols during the year. The following table gives all the particulars in these instances:—

Gaol.	Strength.	Date.	Cases.	Deaths.
Moorshedabad	213	June	14	6
Pubna	254	March, April	14	6
Gauhati	305	June	16	10
Midnapore	1016	March to Dec.	76	36
Buxar	936	Feb. to April	8	6
Chumparun	421	August	38	22
Lahore	1904	August	125	92
Ahmedabad	306	July	12	6
Surat	209	May to Aug.	30	18
Tanna	736	Sept., Oct.	10	7
Trichinopoly	1183	Nov., Dec.	88	53

In the case of Trichinopoly there appears to have been an unaccountable delay in vacating the gaol. This was not done till three weeks had elapsed after the disease broke out, and eighty-four cases had been admitted. The movement into camp at once checked the epidemic.

In 1881 the census of the population of British India was taken, and is stated to be two hundred and fifty-two millions. The returns of seventeen provinces, compared with those of the previous census, show an increase of 12,788,000; but it may be doubtful how far this is accurate, owing to the imperfect manner in which the previous census was made. The returns of births and deaths are still so imperfect that it appears unnecessary to examine the results in detail. Fevers are the most fatal diseases, but, so far as the returns show, they are the cause of only half the proportion of deaths in Madras, as compared with Bengal and Bombay.

Vaccination is carried on with energy and success among the native population. The returns show, that omitting Coorg, from which the report had not been received, there were 4,432,732 vaccinations and 141,050 revaccinations performed by the special vaccination establishments with a successful result in 95·1 per cent. of the former and 54·6 per cent. of the latter. The deaths from small-pox amounted to 74,135, which, the report states, shows a general diminution in the mortality by this disease all over the country. Some account is given of the civil sanitary works which were undertaken during the year, into the details of which it is unnecessary to enter; but we are glad to observe that, among these, arrangements for the supply of pure water occupy an important place.

THE SERVICES.

WAR OFFICE.—Scots Guards: Surgeon A. B. R. Myres, from the Coldstream Guards, to be Surgeon-Major, vice W. H. Pickford, M.B., retired.

INDIAN MEDICAL SERVICE.—To be Surgeons: Bengal—Albert William Denis Leahy, William Wilfrid Webb, Richard Rose Weir.—Madras—Robert Evans Stuart Davis, Herbert Knowles Fuller, William Henry Neilson.—Bombay—William Henry Burke, John Crimmin.

MADRAS MEDICAL ESTABLISHMENT. — Surgeon-Major Benjamin Williamson, to be Brigade Surgeon.

ARTILLERY VOLUNTEERS.—1st Banff: William Lemmon Stewart, Gent., M.A., M.D., to be Acting Surgeon.—1st Devonshire: Acting Surgeon George Chapman Steele-Perkins, M.B., resigns his appointment.—1st Norfolk: William Ribton Spowart, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—1st Cambridgeshire; Acting Surgeon William Easby resigns his appointment.—3rd Cheshire: Acting Surgeon William Henry Sutcliffe resigns his appointment.—19th Middlesex: William Coode Adams, Gent., to be Acting Surgeon.—2nd Devonshire: Acting Surgeon John Lane Cutcliffe resigns his appointment.

ADMIRALTY. — Fleet Surgeon Robert James McMorris has been placed on the retired list of his rank from the 20th inst.

The following appointments have been made:—Fleet Surgeon Adam B. Messer, to the *Neptune;* Surgeon Robert J. Lawson, M.B., to the *Ganges,* for service in the *Sealark;* Surgeon John Cashin, to the *Impregnable,* for service in the *Nautilus;* Surgeon Francis Woore, to the *Lion,* for service in the *Liberty;* Surgeon John M. Phillips, M.D., to the *Impregnable,* for service in the *Pilot;* Surgeon Percy E. Todd, M.B., to the *St. Vincent,* for service in the *Martin;* Surgeon William M. Craig, M.B., to the *Boscawen,* for service in the *Seaflower.*

Correspondence.

"Audi alteram partem."

MEDICAL ACT AMENDMENT BILL.

To the Editor of THE LANCET.

SIR,—From a cursory glance over the above Bill, it appears likely to be a great boon to the next generation of medical men. They will all have one qualification. that of the Medical Council; but it is like every new Act of Parliament—it requires a few improvements and revisions Some of them are really necessary, as will be pointed out. Clause 3 concerns the admission of male and female candidates to examination; nearly the whole of the profession is against the admission of the latter. This is a question to be discussed. Clause 5 requires a very important alteration. "A medical practitioner to be exempt from serving on a jury, &c., only by desire." Medical men have always been exempt. "Desire" requires omitting, as many men, rather than undergo some legal requirements to get exemption, would serve, even at a great loss. Clause 10, sub-section 3: Provision is made for the admission of women "to any medical examination; but the examiners may make such distinction as may be judged proper between the case of men and women." Now, we all know that examiners are human, and, if women are to be admitted into the ranks, let them undergo the same searching examination or be excluded. Section 15: Two members of the Medical Council are to be elected by the registered practitioners. This is what all the periodicals have been contesting for, and at last it is obtained. Section 19, sub-section 3: Women are to be registered as well as men. Section 20, sub-section 2, clause A: This clause requires considerable alteration; it regards the schools recognised and mentioned in the Act, but I cannot find any list. Part 4, section 27, clauses A and B: On and after the passing of this Act, medical titles shall be divided into two classes, "Medical qualifying titles" and "medical higher titles." Any medical title which is not a qualifying title or higher title shall not be entered in the Register; but clause A: In the case of the home practitioner, he is to be called Licentiate of the Medical Council in Medicine, Surgery, and Midwifery, but clause B states, in the case of a colonial or foreign practitioner, he may assume *any title.* This is hardly fair, as a licentiate cannot call himself a surgeon without obtaining a diploma from some College of Surgeons. The foreign medical man can designate himself any title. Clause 27: The latter part of this section gives a registered practitioner who has a higher title, and which the registrar refuses to enter on the Register, power to apply to the Medical Council to register it. My own opinion is that higher titles, or what are considered higher titles, should be designated now. As regards these clauses, I am afraid, if so loosely worded, all practitioners will be at the mercy of the registrar. Section 28, sub-section 5, clause 1, is the paragraph regarding prosecution under the Act for offences against illegal practice. The person must be authorised by the Medical Council, or the public prosecutor must undertake the proceedings, or the Attorney-General. This clause requires considerable alteration, as we all know what prosecutions the Corporations have undertaken, or defended the profession from illegal practice. The following words require inserting: "Any person may undertake any prosecution against an offender for assuming any title to lead the public to believe he is a qualified practitioner, by getting the sanction of the public prosecutor, paying his own expenses, and recouping himself with any fine imposed." Part 5, section 38, clause A: This section relates to providing funds by the sale of the Pharmacopœia and Medical Register. Clause C: An annual fee for keeping the name of each medical practitioner on the Register. Now, I do not think any will object to pay a small sum annually, but let the amount be stated. Really there is no necessity at all, as the Medical Council have money in hand, and have saved money—and what for? Section 57: All persons on the Register on appointed days may have their names transferred without any further payment on application. This seems to be only fair and just to those who have paid a registration fee. Part 8, clause 67: Nothing in this Act contained shall in any way prejudice or affect the lawful occupation or business of a chemist or druggist so far as relates to selling, compounding, or dispensing medicines. I would insert, if possible, "but not to prescribe." That would put a check to the endless abuse and discussion that have been going on for years.

After making these few remarks, it now remains for all medical men to make suggestions and improvements. It is a good Bill. The profession have been asking for it a long time. It may be many years before we get the chance of another, or even an amendment; so let us try our best to make this a perfect one if possible. No doubt there are many more defects than I have pointed out, but, having limited time at my own disposal, I leave the matter in better and abler hands.—I remain, Sir, yours truly,

Hallfields Cottage, Hanley. JOHN SWIFT WALKER, M.D.

*** The points Dr. Walker raises are points of detail, and it is a great service to make practical suggestions for their amendment. Dr. Walker perceives that the Bill, as a whole, is worthy of the Government and of the support of the profession, and though we do not agree in all the proposals for alteration which he makes, we do concur in several. The question of the admission of women to the profession is not an open one. They are admitted already, and every Bill that has appeared has accepted the fact, with provisions for protecting corporations from their membership. Dr. Walker seems to think that the Licentiate in Surgery of the Medical Council would not be entitled to call himself Surgeon. But we can have no doubt upon this point, besides which it is to be expected that the Royal Colleges will make it easy for the Licentiate of the Council to take their diplomas—as the Bill says—"without further examination." Dr. Walker very properly argues for making the exemption of medical men from serving on juries absolute. We also agree with him in objecting to a small annual fee for registration, although, as a *quid pro quo,* a copy of the Register is to be given. We prefer one registration and one lump registration fee. As to the higher titles, Dr. Walker would prefer that they should be designated now and not left to the judgment of the Council. This would be a great pity. The value of the clauses, as they stand, is that it

leaves it to the Council, *at any given time*, to say whether what purports to be a higher title is given after adequate tests. If the higher titles were settled at once, it would enable the bodies that grant them to be careless, and possibly to trade on them—not an unknown trade in the history of medicine. It must be remembered that the Council that is to be, is to be a very responsible and authoritative body—not a talking, weak, recommending body like the present. Then the question, Who is to prosecute? is very important. In our opinion this should be the work of the Public Prosecutor.—ED. L.

FOREIGN GRADUATES AND THE BILL.

To the Editor of THE LANCET.

SIR,—May I be permitted to draw your attention, and that of your readers, to the parts of the new Medical Bill relating to foreign graduates in medicine, which, if not modified before the Bill becomes law, will cause a great injustice to be done to a large number of registered practitioners who possess foreign degrees in medicine in addition to their British diplomas, and who have, by virtue of their foreign degrees, and in many cases for a great number of years, styled themselves "Doctor." These gentlemen, a large number of whom hold responsible public appointments, and have attained eminent positions in the profession, will be under the necessity either of ceasing to use their properly acquired title of "Doctor," or undergoing prosecution and fine, and suffering the consequent obloquy. That this is so is obvious to anyone who may read Part iv., 28 (2), which clearly enacts that no registered practitioner who is also a doctor of medicine of a German, Swiss, or Dutch university, or of the University of Brussels, may use the title of "Doctor" unless he can show that he holds a degree in medicine (M.D.) from a British or Irish university, which bodies alone have the power to grant such titles in this country. For by Part iii., 24, German, Swiss, and Dutch medical degrees, as well as those of the University of Brussels, which do not grant the licence to practise in their respective countries (the States Boards being the sole licensing bodies), are excluded from registration, while American, French, Austrian, Italian, and Spanish medical degrees, which confer the licence to practise in those countries respectively, are entitled to registration under this Act. That this distinction of degrees is requisite in the cases of those who are not otherwise qualified to practise, I am not disposed to question; but it must be apparent to all that a great injustice will be done to that numerous body of registered practitioners to whom I have alluded in the commencement of my letter if the Bill passes as it is now drawn up. I venture to think, Sir, that this important point has escaped your notice, and trust that you will exert your influence to obtain some modification in the wording of the Bill, by which registered medical practitioners who possess, in addition to their British or Irish diplomas, some foreign degree may be permitted to register such degree and be protected from prosecution and fine, with their accompanying evils. I am, Sir, yours truly,

Sheffield, March 23rd, 1883. H. J. HARDWICKE, M.D.

THE BLUE-GUM TREATMENT OF INFECTIOUS DISEASES.

To the Editor of THE LANCET.

SIR,—The interesting paper in your number of Feb. 24th on the employment of blue-gum steam in the treatment of infectious diseases, especially diphtheria, induces me to write before I otherwise should have done on a subject at which I have been working for some time. I quite agree with Dr. J. Murray Gibbes that the most effectual method of preventing the spread of zymotic disease is by disinfecting the germ-laden air of the chamber in which the patient is confined, and I think that this may also be an efficient method of cutting short or modifying the course of the disease, as indeed Dr. Gibbes' illustrative cases would seem to prove; but before a positive assertion can be made, the antiseptic treatment will need a much more extensive trial. The method of employing eucalyptus or blue-gum leaves seems to me to be a rather crude one, and quite inapplicable to this country, where the leaves cannot be obtained fresh in any quantity. The difficulty can, however, be effectually surmounted by saturating the air with the vapour of eucalyptol, as is done by the machine which I showed at the last British Medical Association meeting at Worcester, and which is described in the *Journal* for Sept. 2nd, 1882, along with the experiments which led to its employment. I direct the nurse, or other attendant, to work the bellows for a few minutes, at occasional intervals, so as to keep the air of the room odorous of eucalyptol. By converting the air of the sick chamber into a pure and antiseptic atmosphere, it refreshes and soothes the patient; and in rooms occupied by consumptive cases the antiseptic treatment may be effectually carried out without muzzling the invalid by a respirator. In bedrooms occupied by fever or other infectious cases, the eucalyptus air is not only advantageous to the patient, but salutary to the attendants, since it effects more than is accomplished by the usual disinfectants, by attacking the germs of disease as they are diffused in the air. Messrs. Mayer, Meltzer and Co., the makers of the eucalyptus machine, have arranged to let them out on hire for a small sum per week, hence the treatment advocated is within the reach of all, even the poor.

I am, Sir, your obedient servant,

A. W. MAYO ROBSON, F.R.C.S. Eng.

Leeds, Feb. 28th, 1883.

COAGULA IN THE HEART.

To the Editor of THE LANCET.

SIR,—I have read with interest the communications of Sir Joseph Fayrer in your journal on the subject of ante-mortem coagula in the heart and large vessels. There is one aspect of the subject, however, which is by no means new, but which he appears not to have considered—viz., are these clots really of ante-mortem formation, or are they clots which have formed post mortem in the dilated cavities of degenerated hearts, their yellow colour being due to the slowness with which the blood has coagulated, and the consequent sinking of the corpuscles? In one of his cases he speaks of the branches of the pulmonary being occluded by clots "extending into the subdivisions of the pulmonary artery, ramifying like the branches of a tree." Surely such a condition of affairs as that was utterly inconsistent with life. Such a clot could only have formed during the death agony or post mortem. The very amount of the clots discovered is enough to give rise to doubt as to their ante-mortem formation. In the account of the post-mortems given nothing is said of any microscopical examination of the auricular fibre of the heart. Now, the conditions under which these cases of so-called ante-mortem clots were found—i.e., cases of cachexia from various causes and cases of septic poisoning, are also those in which granular and fatty degeneration of the heart fibre is most frequent. Is it not possible that the giving out of degenerated beats was the essential cause of death in all these cases, and that the clots found were formed in great part, if not wholly, after death?

I am well aware that my offered explanation is not original. Other communications in your journal have, however, failed to call attention to its possible truth. That fatty degeneration of the heart may occur as the result of chronic cachexia is well known. The great difficulty of its diagnosis in many cases, and the frequency of sudden deaths during apparently trifling ailments which it causes, make it very important that every practitioner should always have it in mind. The very great practical importance of the subject may justify my communication even if the cases reported by Sir Joseph Fayrer prove not to belong to this category. I am, Sir, yours truly,

New York, Feb. 21st, 1883. R. VAN SANTVOORD, M.D.

MANCHESTER.

(From an occasional Correspondent.)

THE VICTORIA UNIVERSITY.

THE charter of the Victoria University having recently been made complete by granting to it the power to confer medical degrees, those here specially interested in the faculty of medicine are looking forward with considerable interest to what will be required as to curriculum and

examinations for the degree of M.D., and upon what conditions, if any, the older students of the college will be admitted to examination.

The extensions to the buildings of the medical school are now fast approaching completion, and will provide the most ample accommodation for the Professors of Physiology and Pathology, both of whom have been much hampered in their work in the present building for want of sufficient room. It is not too much to say that the physiological laboratories, &c., will, when finished, be as complete as anything of the kind in this country. In addition, there will be a new museum for materia medica, and additional space devoted to the library, which now numbers upwards of 27,000 volumes, with reading rooms, &c., attached, and, lastly, the Medical Society, which up to now has had to depend upon the College for rooms in which to hold its meetings, will have proper accommodation provided for it.

CHANGES IN HOSPITAL STAFFS.

Vacancies in the honorary staffs of our various hospitals have lately arisen apace. At the Salford Royal Hospital Mr. H. Young, pathologist to the infirmary, has been appointed surgeon; at the Clinical, Mr. Southam, assistant-surgeon at the infirmary, has been elected surgeon; at the Lock the vacancy caused by the death of Mr. Blackmore has been filled by the promotion of Mr. Chubbe, who for many years has been house-surgeon there; and, lastly, there is the more important post of assistant-physician to the infirmary now vacant by the promotion of Dr. Dreschfeld, to be physician on the recent retirement of Dr. William Roberts. The only names at present mentioned of gentlemen likely to be candidates for this appointment are those of Dr. Graham Steele, Dr. H. Tompkins, and Dr. Ashby, all of whom are well known in the medical world here as long connected with hospital work, the first named having been resident medical officer at the infirmary for more than four years, whilst Dr. Tomkins, now resident medical officer at the Infirmary Fever Hospital, has held office in connexion with the infirmary for nearly eight years. Dr. Ashby holds the post of physician to the Children's Hospital at Pendlebury.

The Clinical Hospital, whose funds have lately been somewhat embarrassed, has recently held a bazaar for the object of raising some £1200, with a very satisfactory result, as the proceeds of this, together with donations, including a handsome one of £500, have sufficed very nearly to raise that amount.

The concert given on behalf of the Royal Infirmary by Mr. Chas. Halle, on the 15th inst., when Gounod's oratorio, "The Redemption," was performed, resulted in the addition of some £330 to the funds of that charity.

For some time past the committee of the Eye Hospital have experienced much difficulty in dealing with the ever-increasing number of cases applying for admission there, and in their last report they point out that increased accommodation is urgently required, and it is understood that active measures are now being taken to acquire another site, with a view to erecting at as early a date as possible a larger and more convenient building.

LIVERPOOL.

(From our own Correspondent.)

THE LIVERPOOL HOSPITALS AND THEIR FINANCES.

ALTHOUGH, as already noticed in THE LANCET, the princely sum of £80,000 has been raised for the Royal Infirmary rebuilding within a very short time, and there is every probability that the total sum required, £100,000, will soon be reached, the financial position of the local hospitals is even less satisfactory than those in the metropolis. Being of comparatively recent growth, Liverpool and its hospitals have not the wealthy endowments enjoyed by more ancient cities and towns. The Royal Infirmary was established 134 years ago, the Northern and Southern Hospitals within the last half century, the Stanley Hospital, Eye and Ear Infirmary, and the Children's Infirmary, are all still more modern institutions. The income from invested funds is in all very moderate, and the greater proportion of the expenditure has to be met by annual subscriptions and donations, the Hospital Sunday and Saturday Funds and donations, even legacies, have frequently to be applied to meet current expenses. The vacancies in the ranks of annual subscribers caused by death or removal are not replaced, and the consequence is that a considerable deficit occurs which has periodically to be made up by a strong appeal to the public.

THE LATE MR. S. R. GRAVES, M.P., AND THE LIVERPOOL HOSPITALS.

In connexion with hospitals and their finances, an incident occurred in Liverpool twenty-one years ago which suggests a means whereby increased support might be secured. In the year 1862, the late Mr. S. R. Graves, M.P., being then Mayor, the three principal hospitals (Royal Infirmary, Northern and Southern Hospitals) were each encumbered with debt, the total being between eight and nine thousand pounds. At a public meeting resolutions were passed recommending an appeal to the public, and the whole of the amount was raised, thus freeing the hospitals from debt. Although liberal contributions flowed in, the Mayor setting the example, a considerable amount was raised in small sums by an organised committee, who canvassed from house to house and from shop to shop, accepting every donation, however small. Those who cannot afford the traditional guinea should be encouraged to subscribe what they can, and the new postal orders afford every facility for sending small subscriptions to the infirmary or hospital.

NOTIFICATION IN WEST DERBY.

A considerable proportion of the suburbs of Liverpool is comprised in the urban district of West Derby, of which Dr. Carter is the medical officer of health. His report for the past year has been recently issued, and is of great interest as regards the subject of infectious diseases and their notification. Typhus fever appeared in five different houses in a street just beyond the borough boundary in the early part of last year, the houses being tenanted by twenty-eight people. In one house two families occupied two rooms which opened into each other, and in one lay the body of a patient who had died from the fever. Under threat of a justice's order the body was removed, and the room closed and disinfected. From another house a mother and one child were removed to hospital, while the four remaining children were removed to another room, the one which they had left being disinfected. "By promptly following up all the cases in this way," says Dr. Carter, "obtaining the early removal of those who were sick to hospital, and the thorough disinfection of the houses and clothes, the disease was soon subdued." Dr. Carter adds, "considering the extreme prevalence of the disease in Liverpool and Toxteth, it is a matter, I think, of congratulation that so few cases have occurred in West Derby, and that the disease has not spread to any extent."

LIVERPOOL HEALTH COMMITTEE.

At the last meeting of this committee on the 22nd inst., the medical officer of health, Dr. Stopford Taylor, reported that the rate of mortality was 34·2 per 1000. Zymotic diseases occasioned 63 deaths, being an increase of 15 over the average.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

THE WATER SUPPLY.

AT Durham, the water question has caused some commotion among its citizens, and a public meeting has been held and resolutions passed against the excessive charges at present being made by the supplying company. Some very strong facts were adduced as showing the encroachments on the inhabitants in that way. Complaints were also made of the quality of the supply. An instance was given of a poor widow, whose former payment for water had been £2 9*s*., but the charge had been raised to £5.

SANITATION IN DURHAM.

The Durham Rural Sanitary Authority has received what is called "a wigging" from the Local Government Board in the form of a letter, complaining that, since the annual report of the Medical Officer of Health for 1882 was presented, pointing out some grave sanitary defects, very little has been done in carrying out the recommendations

appended to the report by their inspector, and that still many of the occupied houses are in a damp and dilapidated condition, unfit for habitation, and without a proper system of sewerage and a wholesome supply of water. The authority is plainly charged with neglect in not carrying out these and other sanitary requirements, and told to look to its better behaviour in future.

THE UNIVERSITY MEDICAL SOCIETY SOIREE.

The event of the past week here has been, without doubt, the musical and microscopical *soirée* given by the University of Durham Medical Society. It was held in the Wood Memorial Hall, and it as well as the adjoining apartments were tested to the utmost to receive the visitors. The vocal and instrumental concert was of a high class, and the display of scientific apparatus and other objects of interest was very entertaining. But it was the general opinion that the microscopic attractions have never been excelled, if even equalled, at any gathering in Newcastle, and they were not only varied and full of the highest interest, but they exhibited much judgment and good taste on the part of those who arranged this very important department; for sometimes we see, on the one hand, objects of too purely a professional nature for a mixed assembly, and, on the other, slides shown for purely juvenile amusement. This rising Society is not only to be congratulated for the evening it afforded its guests, but is to be thanked by our profession, since it is likely to strengthen the popular feeling in our favour.

MARSHALL HALL MEMORIAL PRIZE.

The adjudication of the Marshall Hall Memorial Prize, and its award to Dr. David Ferrier, for investigations in the physiology of the nervous system, have given much satisfaction here, for it may not be known to some of your younger readers that this prize was initiated from Newcastle in your columns, and it at once received the powerful support and interest of THE LANCET, which were continued until the object was fully and thoroughly accomplished.

IS A CARAVAN A HOUSE?

At Jarrow, the other day, the Town Council was exercised to determine whether a caravan on wheels was a house or not; and they actually had a letter from the Local Government Board, in no way settling the question, but throwing the onus on the Council, by saying that it was not aware of any proceedings the Council could take for declaring the caravan unfit for habitation, as it appeared doubtful, although it might be used as a dwelling, whether it could be considered a habitation under the meaning of the Act. Considering that the caravan in question was a dwelling on wheels, and contained a case of small-pox, common sense would have suggested that it was a dwelling of a most dangerous kind; but the ways of Government boards are strange, and the meaning of some sanitary Acts of Parliament is stranger still. We do not seem to get rid of small-pox here, for the last returns of our medical officer of health show a list of 110 cases of infectious diseases for the previous fortnight, of which 51 were small-pox. Most of the cases were contributed by the district of Byker.

Newcastle-on-Tyne, March 20th, 1883.

SCOTTISH NOTES.

(*From our own Correspondent.*)

DR. BLAIR of Tayport, near Dundee, has just been presented with his portrait in oil and a purse of sovereigns, as a mark of the public appreciation of his professional and philanthropic work. Dr. Blair has for many years taken a leading part in all schemes likely to benefit the people generally; and the hearty manner in which his services have been rendered have now been very fittingly noticed. Dr. Blair stated that he looked upon the presentation as an intentional compliment to the noble profession to which he had devoted himself.

ABERDEEN STUDENTS AND THE INFIRMARY.

The students of Aberdeen University have just decided on a step marked by great public spirit, and likely to lead to excellent results. The infirmary being burthened with such a heavy debt as to delay needed improvements there, the students in the various faculties have united their forces, and determined upon an effort to rid the directors of their difficulty. Besides their private subscriptions, they hope to raise a considerable sum by the canvass of friends during the approaching holidays, and it is not unlikely that the eight hundred willing workers may be enabled to offer such a sum as may be creditable to themselves, while useful as an incentive to the citizens. During the past session the students have already subscribed about £30; and when the large amount of their fees is considered, they appear as the most useful friends the institution can boast.

THE CRICHTON ROYAL INSTITUTION, DUMFRIES.

A good deal of interest was excited over the vacancy in this institution, and the canvass was very keen for the lucrative and otherwise desirable appointment. Dr. Rutherford may, therefore, be all the more congratulated on his success, as he had several excellent men to oppose. I believe that, besides influential support from the West, the Lunacy Board were particularly desirous that an opportunity should be given for the fullest employment of the non-restraint system in a mixed asylum; and they felt that no one could be better trusted in this work than Dr. Rutherford, who has for some years adopted the method unconditionally at Woodilee. Both sides of that spacious building can be traversed without the accompaniment of a warder, as locked doors do not exist, and, though accidents have occasionally occurred, upon the whole the system has given every satisfaction. On this account there will be a wide desire for Dr. Rutherford's complete success at Dumfries; and he has, I believe, in a special degree the sympathy of other alienists. There is now a very active competition for the vacancy at Lenzie.

SUICIDE OF A MEDICAL MAN.

Widespread regret was felt on Friday last when it became known that Dr. Edward Touch of Inverary had, during the previous night, committed suicide. The body was found lying across the bed in his lodgings, and the throat cut. Dr. Touch graduated in Edinburgh in 1848, where he also took the diploma of the R.C.S., spent a number of years in the army, part of which were passed in India, and commenced practice about nine years ago in Inverary. The deceased was a general favourite in his district, and held the appointment of surgeon to the local prison. He was observed to be somewhat despondent for some days, and was last seen on Thursday afternoon. His widow, with a large family of young children, resides at Dunoon.

PAUPER LUNATICS.

Both at Stirling and Kirkcudbright there has lately been a discussion by the parochial authorities as to the disposal of harmless lunatics. To those who look with suspicion upon the gradual accumulation of these poor creatures in asylums and workhouses, the plain speaking of certain members of these boards is very instructive. At Stirling especially the liberal assistance offered by Government for the support of such cases was boldly urged as a reason for their incarceration; the complete exclusion of all reference to the patient's interests, and the consideration for the pecuniary question which was alone shown, are enough to prove the damaging influence of the present system. In the case of Kirkcudbright, the opposition of the parish has put a stop to the project for adding lunatic wards to the poorhouse; but the subject is still *sub judice* at Stirling.

HADDO HOUSE COTTAGE HOSPITAL.

Lord Aberdeen last week opened a hospital on his own property, which has been generously placed at the disposal of the neighbourhood by his lordship. The cost of the building is about £1000; it will be used for ordinary medical and surgical cases, to the exclusion of incurable or infectious diseases. Patients will be required to make a payment of not less than 5s. per week towards the support of the institution, and the management will be chiefly in the hands of Dr. Duncan, who commences practice in the district. Lord Aberdeen made a very sensible speech on the uses of cottage hospitals, and was followed by Drs. Wilson and Grey, both of whom, as well as several clergymen, expressed their sense of the value of such institutions, and more especially of the kindness which had provided the one now placed in their midst. Dr. Wilson stated that there were now three hundred cottage hospitals in the United Kingdom.

IRELAND.

(From our own Correspondent.)

TYPHUS FEVER IN DUBLIN.

TYPHUS prevails rather extensively at present in Dublin, and last week there were 103 cases of the disease under treatment in the hospitals. The Dublin Sanitary Association, in view of the prevalence of typhus fever, has passed a resolution, urging upon the Public Health Committee the necessity of improved inspection of tenement dwellings, so as to guard against overcrowding, which exists to an unusual extent in Dublin, and is recognised as a chief inducing cause of the malady. As an example of the way contagion is spread, the case of a man named Roe, who resided with his wife and eight children in a house off the High-street, may be instanced. He contracted typhus, died of it, and, in accordance with the usual custom, a "wake" was held for two days and two nights over his remains. As might be expected, the disease spread to many parts of the city, nineteen persons having been attacked, of whom four proved fatal within a short time. The wife of the deceased also died, and the children were removed to Cork-street Fever Hospital. The sanitary authorities have taken all the precautions in their power to prevent the disease spreading.

For the Chair of Practice of Medicine in the Royal College of Surgeons, vacated by Dr. James Little, of the Adelaide Hospital, the following gentlemen have been mentioned as probable candidates—viz., Dr. Duffey (Physician to the City of Dublin Hospital), Dr. J. W. Moore, and Dr. A. Foot, the two latter being connected with the Meath Hospital.

Both measles and scarlatina have been very prevalent in the Cappagh district of the county Limerick. The outbreak of scarlatina has attacked many adults, and several deaths have already taken place from this malignant affection.

During the past year nearly 1500 patients suffering from ophthalmic and aural diseases were treated at the Belfast Ophthalmic Institution, of which number 100 were intern, all serious cases of eye and ear affections which could not be efficiently treated at the extern department. It is satisfactory to learn that there are at present thirty students attending clinical instruction at the hospital.

Obituary.

PROFESSOR LASÈGUE.

(Communicated by Professor BALL.)

ONE of the most prominent medical figures of the present day has disappeared from the ranks. Professor Lasègue died on the 20th inst. of diabetic consumption. Although the disease had been making insidious and slow progress for several years, its last steps were so rapid that the eminent Professor sank into the grave a few months, nay, a few weeks, after presiding over the jury for the agregation at the Paris Faculty of Medicine.

Professor Lasègue was sixty-seven years old. He was the son of a botanist, and in early life, having achieved great success in his classical studies, he devoted his attention to tuition. He was at that time associated with his intimate friend Claude Bernard, who undertook the scientific part, whilst Lasègue retained the classical and literary side. The deep knowledge of metaphysics had no doubt a decided influence upon the mind of his illustrious companion, while, on the other hand, the scientific tendencies of Bernard made a deep impression on Lasègue, who always maintained, however, his independence on the basis of clinical medicine. The companionship was short, and soon each of the two young men struck off into the path which he was henceforth to pursue. Claude Bernard became the pupil of Magendie, while Lasègue, selected by Trousseau as his clinical assistant (*chef de clinique*), published several scientific papers in collaboration with his distinguished leader, and soon rose by competition to the dignities of *agrégé* of the Faculty and Physician to the Hospitals. His lectures at the Faculty as auxiliary professor were well attended and excited universal interest; in fact, Lasègue was unquestionably one of the wittiest and most eloquent teachers of his time, and held the foremost rank among that phalanx of distinguished men who now began to press to the front in the ranks of the medical profession. About this time Lasègue became, together with his friend Jollin, the celebrated surgeon, the editor of a widely spread periodical, the *Archives de Médecine* in which, for nearly thirty years, he lavishly expended the treasures of his mind and published an incalculable number of original communications. But while Lasègue was thus becoming a prominent man in the study of the practice of medicine, another and a distinct branch of knowledge was sedulously pursued by him, and ultimately became the foundation stone of his great reputation.

In 1849 Lasègue, who as a medical student had devoted considerable attention to the study of mental diseases, was nominated by M. Dufaure, then Minister of the Interior, to the apparently subordinate position of physician to the depôt of the Prefecture of Police. To this place all persons arrested on the charge of lunacy by the public authorities, or picked up by the police in the streets, are conveyed, and the physician decides whether they are to be released or transferred to a lunatic asylum. The immense number of cases which thus passed under Lasègue's eyes furnished him with the materials of a large number of interesting papers, among which his Memoirs on the *délire des persécutions*, or mania of persecutions, stand foremost. Shortly afterwards Lasègue was appointed expert to the legal courts, and consulted in cases of lunacy. His pregnant wit, his quick perception, and his admirable facility of elocution, raised him to the front rank, and the part which he played in several important trials caused him to be considered as the first of the French alienists. Lasègue, however, insisted on retaining his character as a general physician; he became Professor of Clinical Medicine, and obstinately refused the chair of Mental Medicine, which on various occasions was repeatedly offered to him.

It belongs to posterity to pass a definitive judgment upon the numerous productions which have flown from the fertile pen of this eloquent author. To those who have known the man, who have felt the friendly pressure of his hand and who have experienced that attraction which his personal qualities exerted on all those who met him, it belongs to commemorate those charming and elevated qualities which characterised the individual himself, and can only be appreciated by those who knew him personally. The sparkling wit of his conversation, the power of his eloquence, and the astonishing fertility of his brain will be long remembered by those who enjoyed the benefit of his instructions, or who mixed with him in society, while the excellent qualities of his heart will remain deeply impressed upon the minds of those who have survived him. In short, Lasègue was both an eminent man and a kind-hearted one, a combination of qualities not always found to exist amongst the great men of the present age.

AMBROSE CECIL HUGHES, M.D., F.R.C.S.

THE grave has recently closed over the remains of one who for many years occupied a prominent place in the profession of Liverpool.

The deceased, who was fifty-nine years of age, was educated at Trinity College and the Royal College of Surgeons, Dublin, and held the following diplomas:—M.D. St. And., L.K.Q.C.P.I. and L.M., F.R.C.S., and L.R.C.S.I., L.A.H. and L.M. Dub. He was consulting physician to the Liverpool Dispensary, physician to the Stanley Hospital, honorary physician to the East Dispensary, and for several years honorary surgeon to the Eye and Ear Institution, Liverpool. He commenced his professional career as a general practitioner in 1856 in Liverpool, and rapidly rose into large practice, which he had successfully carried on for the last twenty-seven years, when he was suddenly brought to his untimely end by the result of an accident, being thrown out of his gig from a child's hoop getting entangled in his horse's legs on the 2nd inst., within a few yards of his own house, about seven o'clock in the evening, causing his death three days afterwards from pulmonary congestion, due to shock and a blow from the wheel upon the chest. Dr. Hughes was a man of indomitable courage, self-reliance, and energy; of unimpeachable integrity, utter unselfishness, unwearied industry, and high attainments. The inquest was held before the city coroner, Mr. Clarke Aspinall, and the jury returned a verdict of accidental death. The

Stanley Hospital, in which he took a keen interest, has lost one of its best supporters, for besides his medical duties Dr. Hughes was ever ready to promote any scheme that suggested itself for the welfare of that institution. That Dr. Hughes was universally esteemed in Liverpool was amply shown by the very large attendance of his professional brethren and spectators of all ranks and positions in life at his funeral, which took place at Anfield Cemetery on March 8th.

ROYAL COLLEGE OF SURGEONS.

A SPECIAL meeting of the Council of the College was held on Thursday last in reference to the Medical Bill now before the House of Lords. The President and Vice-Presidents of the College were deputed to seek an interview with the Lord President of the Council with a view to represent the opinion of the authorities of the College on some clauses of the Bill. On Wednesday next an extraordinary meeting of the College Council will be held to consider the results of this interview, and to decide on any further steps it may be deemed desirable to take. A statement of objections has been prepared and presented, which, in an amended form, we shall publish next week. Meanwhile it may be stated that the chief objection urged by the College against the proposed Bill will be that it is likely to lead to the extinction of the existing diploma of Member of the College. Some disappointment may be felt that the Council has not given effect to a rumour that, at this crisis in the history of the College, a general meeting of the Fellows and Members was to be convened to consider and discuss what action the executive should take with regard to the Bill. Perhaps this oversight may be rectified next Wednesday.

MEDICAL NOTES IN PARLIAMENT.

THE House of Commons reassembled on Thursday afternoon, and the House of Lords will resume their sittings on Tuesday next.

In the Commons the Infectious Diseases Notification Bill stands for second reading on Tuesday, April 17th; but as there are a number of motions before it, there is every probability that the Bill will again be deferred.

Mr Stansfeld's motion against the Contagious Diseases Acts is down for April 20th.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on March 22nd:—

Anwyl, James Norman, Devon and Exeter Hospital.
Curnock, Wesley, Portland Villa, Leamington.
Cuthbert, W. Hawkins, The Grove, Newtown, Montgomeryshire.
Mander, Percy Robert, Grimsbury, Banbury.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Henry Thomas Barton and Victor Norman Bindley, London Hospital; Arthur Edward Dodson, Charing-cross Hospital.

The Scholarships in Medicine and Surgery recently founded by the Society are each of the value of £100. They are tenable for two years, and are open to all medical students of a certain standing. The dates of the examinations for the respective Scholarships, and other particulars, will be fully advertised.

EARLSWOOD ASYLUM FOR IDIOTS.—The thirty-sixth anniversary festival of this institution was held on the 14th inst. There are now 565 inmates from all parts of the kingdom. The expenditure is about £30,000 per annum, and the regular income only £15,000, the committee having to depend for the remaining £15,000 upon donations and legacies. During the evening the secretary announced donations and subscriptions from the ladies and gentlemen present and from other supporters amounting to about £1000.

THE Library of the Royal College of Surgeons will be closed this day (Friday) for the purposes of the Primary Examination in Anatomy and Physiology.

TWO men were sentenced at Birmingham last week to a month's imprisonment each, one for selling the flesh of donkeys and the other the flesh of horses as human food.

THE directors of the Alexandra Hotel have presented Mr. James Teevan, F.R.C.S. Eng., with a massive silver punchbowl as a recognition of his medical attendance on their visitors for upwards of twenty years.

BRISTOL EYE HOSPITAL.—The seventy-second annual meeting of the friends of this institution was held on the 21st inst. The committee stated that the financial condition was satisfactory, and that the number of the patients, both in and out-door, was greater than in the previous year. The majority of the out-patients are necessarily resident in Bristol and the neighbourhood, but it appears from the report that the benefits of the hospital are widely extended, even to persons residing in different parts of Wales, some of whom have been admitted as in-patients.

FEVER HOSPITAL, CORK.—From the medical report it would seem that during the past year there was a very serious increase in the number of cases admitted from typhus fever, while, in addition, the type of the disease was of a very malignant kind. The grant from the Corporation principally supports the hospital, the subscriptions from private sources being very trifling indeed, and as a result the year has closed with a debt of £787. The poorer classes who are attacked with fever mainly go to the Workhouse Fever Hospital, but a better class seek admission to the Cork Fever Hospital.

HERTFORDSHIRE SEASIDE CONVALESCENT HOME.—At the annual meeting of the friends of this Home, which was held on the 16th inst., it was stated that during the past year there had been a total of 396 patients received into it, an increase of 30 upon the previous twelve months; of these 230 were discharged well, 152 better, 12 worse, and 2 died. Attention was called to the rule which permits persons who cannot be strictly regarded as objects of charity to obtain admission by payment of 12*s.* 6*d.* per week, provided that in each case the necessary certificates be given. The receipts during the year had been £1779, and the expenditure amounted to £1680.

NEW HOSPITAL FOR INCURABLES AT ABERDEEN.—Building operations have been commenced on the ground acquired at Morningfield by the directors of the Hospital for Incurables at Belleville, the hospital at the latter place having been disposed of. The sanitary arrangements of the new building are to be of a very superior kind, the architect having, prior to the preparation of plans, visited institutions of a kindred nature in various parts of the country, thus securing the introduction of everything calculated to promote the efficiency of the hospital. The total cost is estimated at between £6000 and £7000, provision being made for between fifty and sixty patients.

YORK COUNTY HOSPITAL.—The annual Court of the Governors was held on the 13th inst. The committee stated that they had been much disappointed with respect to a general Hospital Sunday Collection. Collections had been made on Christmas day, and out of forty-two places of worship only twenty-five had contributed, and the total sum realised for the hospital was £83 7*s.* 1*d.* Considerable discussion took place respecting the proposed alterations of certain rules, and the introduction of new rules affecting the control as well as the admission of patients, and the election of certain officers. No alteration of public importance was, however, made.

THE POPLAR HOSPITAL FOR ACCIDENTS.—From the recently published annual report of this hospital it appears that the number of in-patients admitted during the year was 618, being 25 in excess of the previous year, and of out-patients 5759. Though the cost of maintenance for the year was somewhat less than in 1881, the expenditure was in excess of the income, and the committee appeal to the public to support a hospital which opens its doors at all times to accidents and cases of emergency without governors' letters, the only claim necessary to ensure the benefits of the institution being the unfortunate one of unforeseen disaster to the recipient.

OXFORD UNIVERSITY.—For the Examinations for the degree of Bachelor of Medicine, either First or Second, to be holden in Trinity Term, candidates should send their names, on or before May 1st, to the Regius Professor of Medicine, Medical Department, Museum, Oxford.

PRESENTATIONS.—On the 22nd inst., at the Bristol School of Medicine, a presentation, consisting of an address and several volumes of medical works, was made by the students to Dr. Evans, who for the last two years has been medical tutor to the school, and who has now been appointed house physician at the Royal Infirmary.—Dr. Edgar Flinn, on the occasion of his leaving Brownhills, Staffordshire, where he had been in practice over seven years, was presented with an illuminated address and a very valuable timepiece, subscribed for by the *employés* of the Brownhills and Conduit Collieries. The inhabitants of the town and district also presented him with a superior case of surgical instruments accompanied by a neatly illuminated album containing an address and the names of the subscribers. Dr. Flinn, previous to his departure, was entertained at dinner at the Station Hotel by his fellow-townsmen, when many expressions of regret were made at his removal to Kingstown to undertake the appointment of Surgeon to St. Michael's Hospital.—Dr. Coleman, of Woolwich, has been presented with a valuable carriage clock, in recognition of his gratuitous instruction in the St. John Ambulance work, of a class of gentlemen at Charlton.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.—The Annual General Board of Governors of the above charity was held on the 13th instant. There was a numerous attendance, probably owing to the fact that a portrait of the late Mr. E. Pugh was to be presented to the institution. Mr. R. H. Briscoe, an ex-chairman of the weekly board, said the late Mr. Pugh was one of the best friends the hospital ever had; and Mr. Vincent Jackson recapitulated the generous benefactions of his deceased friend, especially the foundation of the Edward Pugh Hospital Convalescent Charity at Rhyl; also the erection of a large building devoted to the Bell Medical and Surgical Reference Library, and to the use of the medical profession of the town and district. The annual report stated that 1238 in-patients and 10,526 out-patients were treated during the year. The cost per head of in-patients was £4 16*s.*; the cost per bed occupied, £56 13*s.* 3*d.*; and the average stay in the hospital, 32¼ days. The cost per out-patient was 2*s.* The Hospital Saturday contributions amounted to £2113 10*s.* 6*d.*, as against £2152 7*s.* 3*d.* in 1881. The total receipts, including a small balance from 1881, were £6774 10*s.*, and the expenditure £6901 8*s.* 5*d.* By the munificent gift of £1000 from a member of the weekly board it is hoped to increase and improve the accommodation for infectious cases in the fever wards.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALLEN, T. W. J., L.R.C.P.Lond., M.R.C.S., has been appointed Honorary Surgeon to the Grimsby and District Hospital, vice Brocklesby, resigned.

BROWN, WILLIAM, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer of Health for the Carlisle Urban Sanitary District, vice Elliot, deceased.

CHEESEWRIGHT, JOHN FRANCIS, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Greasborough Urban Sanitary District.

COCKS, CAMBRIDGE CARY, M.D. St. And., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Ross Urban Sanitary District.

GRIFFITHS, WILLIAM HUGHES, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Hinckley Urban Sanitary District.

HAMILL, ROBT. JAMES, M.D.Q.U.I., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the E and F Districts of St. George's Union.

HORSFALL, HENRY, M.B., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health to the Bedale Rural Sanitary Board, vice R. Fothergill, M.R.C.S., L.S.A.Lond., resigned.

MACBRYAN, HENRY C., L.R.C.P.Ed., Assistant Medical Officer to Burntwood Asylum, Lichfield, has been appointed Assistant Medical Officer to the Middlesex County Asylum, Hanwell.

MATOU, GEORGE, M.D. St. And., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Monmouth Urban Sanitary District.

MCBRIDE, PETER, M.D., C.M., F.R.C.P.Ed., has been appointed Aurist and Laryngologist to the Edinburgh Royal Infirmary.

ROGERS, EDWARD COULTON, M.R.C.S., L.S.A.Lond., Senior Assistant Medical Officer of the Three Counties Asylum, has been elected Medical Superintendent of the Cambridgeshire Asylum at Fulbourn.

SANDERS, CHARLES, M.B.Lond., M.R.C.S. (late House-Surgeon), has been appointed House-Physician to the Queen's Hospital, Birmingham, vice A. Orchard, M.R.C.S., resigned.

SANDERS, ROBT. CORLES, L.R.C.S.I., has been appointed Medical Officer for the Marton District of the Rugby Union.

STAINTHORPE, WM. WATERS, M.D., C.M.Glas., has been appointed Medical Officer of Health for the Saltburn Urban Sanitary District, vice Brameld.

SWETE, EDW. HORATIO WALKER, M.D. St. And., M.R.C.S., L.S.A.Lond., S.Sc.Cert.Camb., has been reappointed Medical Officer of Health for the Droitwich Urban Sanitary District.

THOMPSON, WM. CHRISTOPHER, L.K.Q.C.P.I., has been appointed Medical Officer for the Pinchbeck District of the Spalding Union.

WILDING, WM. ARTHUR, L.K.Q.C.P.I., M.R.C.S., has been appointed Medical Officer for the First District and the Workhouse of the Church Stretton Union, vice R. Wilding, deceased.

WILLIAMS, HOWELL, L.R.C.P.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Richmond (Yorks) Urban Sanitary District.

WILSON, ROBT. ARCHIBALD, M.D., C.M.Glas., has been reappointed Medical Officer of Health for the Lunesdale Rural Sanitary District.

WILTON, JOHN PLEYDELL, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Gloucester Port Sanitary District.

Births, Marriages, and Deaths.

BIRTHS.

ALABONE.—On the 24th inst., at Lynton House, Highbury-quadrant, the wife of Edwin W. Alabone, M.D., of a son.

BLAXLAND.—On the 20th January, the wife of Herbert Blaxland, Medical Superintendent of the Hospital for the Insane, Callan-park, New South Wales, of a son.

FISHER.—On the 24th inst., at Kings Langley, Herts, the wife of Frederick Charles Fisher, of a son.

JALLAND.—On the 18th inst., at St. Leonard's House, York, the wife of W. H. Jalland, F.R.C.S., of a son.

LITHGOW.—On the 15th inst., at Stirling House, Farnborough, Hants, the wife of T. G. Lithgow, L.R.C.P.Lond., of a son.

MACKERN.—On the 24th inst., at Sunnydene, Tunbridge Wells, the wife of John Mackern, M.B.Cantab., of a daughter.

PRICE.—On the 19th inst., at Kettering, Northampton, the wife of J. Lowe Price, M.R.C.S., of a daughter.

WILSON.—On the 23rd inst., at Morar, Gwalior, Bengal, the wife of Surgeon-Major James Wilson, A.M.D., of a daughter.

MARRIAGES.

HILL—BARBER.—On the 21st inst., at Mount Zion, Birmingham, Alfred Bostock Hill, M.D., F.I.C., eldest son of Dr. Alfred Hill, Medical Officer of Health, Birmingham, to Elizabeth, elder daughter of W. H. Barber, Esq., of Ashbourne, Richmond-hill-road, Edgbaston.

KELLY—BEART.—On the 26th inst., at St. John's, Norwich, by the Very Rev. Canon Duckett, D.D., A. B. Kelly, L.R.C.P., M.R.C.S., of Davies-street, Berkeley-square, eldest son of A. B. Kelly, M.A., of the Middle Temple, Barrister-at-Law, to Mary Elizabeth, third daughter of the late Robert Gates Beart, Esq., of Raynham, Norfolk.

TOUGH—LOBBAN.—On the 16th inst., at King-street, Aberdeen, William Robb Tough, M.A., M.B., C.M., of Audlem, Cheshire, to Margaret, eldest daughter of William Lobban.

DEATHS.

CHALDECOTT.—On the 28th inst., at Harcourts, Chertsey, Surrey, Thomas Andrews Chaldecott, M.D., M.R.C.S., L.S.A., late of Hongkong.

ETON.—On the 25th inst., at his residence, Stoke Poges, Edward William Eton, M.B., late of Windsor, in his 73rd year.

FALL.—At Kneighton House, Winfrith, Dorset, Joseph Fall, M.R.C.S.E., formerly of Tollerton, Yorks, aged 42.

GRUGGEN.—On the 22nd inst., at his residence, Pilgrim-street, William John Gruggen, M.D., late R.N., aged 64.

IRWIN.—On the 26th inst., at his residence, Belvoir-street, Leicester, William Crossley Irwin, M.D., aged 74.

ISBELL.—On the 18th inst., at Wye Bank, Broomy-hill, Hereford, Richard Woodward Isbell, Surgeon, aged 30.

MCLINTOCK.—On the 25th inst., at the Grove House, Church Stretton, Salop, J. R. McLintock, M.D. Friends will please accept this (the only) intimation.

MONTEFIORE.—On the 28th inst., at Portman-square, Nathaniel Montefiore, J.P., F.R.C.S., aged 63.

MORRIS.—On the 19th inst., at Burns-street, Nottingham, Beverley Robinson Morris, M.D., of Burnham, Somerset, son of the late Rear-Admiral Henry Gage Morris, aged 66.

ROBATHAN.—On the 27th inst., at the Grove, Risca, Mon., Edward Robathan, L.R.C.P.Ed., M.R.C.S., aged 73.

SYRNES.—On the 16th inst., at his residence, Axminster, Devon, James Finmore Syrnes, Retired Surgeon, aged 92.

WELCH.—On the 24th inst., at Portsdown-road, Maida-vale, Francis Welch, M.R.C.S., late of Taunton, aged 73.

YOUNG.—On the 21st inst., at Whitehall-yard, Whitehall, Alexander Chesney Young, M.D., long a resident at New Orleans, U.S., in his 84th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 29th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 5.30 A.M.
Mar. 23	30·12	E.	31	..	..	30	25	..	Hazy
,, 24	30·02	N.E.	29	..	..	45	21	..	Cloudy
,, 25	29·93	N.W.	38	34	..	44	25	..	Fine
,, 26	29·29	N.W.	37	34	..	46	31	..	Cloudy
,, 27	29·50	N.	35	33	..	44	26	..	Overcast
,, 28	30·06	N.W.	37	34	..	46	27	..	Overcast
,, 29	30·16	S.W.	43	39	..	50	31	..	Bright

Medical Diary for the ensuing Week.

Monday, April 2.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.
MEDICAL SOCIETY OF LONDON.—Dr. de Watteville will show a New Method of obtaining Light for Medical Purposes.—Dr. Symes Thompson, "On the Alpine Winter Health Resorts."—Mr. Benton will show a New Form of Diet Chart and a Form of Feeding Cup."—Dr. Cullimore, "On the use of the Moxa in Chronic Affections of the Spinal Cord."

Tuesday, April 3.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ROYAL INSTITUTION.—3 P.M. Professor McKendrick, "On Physiological Discovery."
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Drs. Frederick Taylor, Finlay, Hale White, Ralfe, Stephen Mackenzie, Seymour Taylor, &c., "On the Morbid Anatomy and Pathology of Diabetes."

Wednesday, April 4.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. G. B. Longstaff, "On Phthisis, Bronchitis, Pneumonia: are they Epidemic Diseases?"
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown.—Dr. Fancourt Barnes, "On a Case of Labour with Atresia Vaginæ." Dr. Herman, "On Gangrene of the Vulva."

Thursday, April 5.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
ROYAL INSTITUTION.—3 P.M. Dr. Waldstein, "On the Art of Pheidias."
HARVEIAN SOCIETY.—8.30 P.M. Dr. S. Phillips will exhibit a Patient with Double Congenital Dislocation of the Radius.—Pathological Specimens: Tubercular Ulceration of the Bladder, Prostate, &c. (Dr. Silcock); General Dilatation of the Ventricular Cavity in the Brain of a Lunatic (Mr. J. E. Lane).—Dr. John Williams, "On Antiseptics in Midwifery in Lying-in Hospitals and Private Practice."

Friday, April 6.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. A. Geikie, "On the Cañons of the Far West."
WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M.

Saturday, April 7.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. A. Geikie, "On Geographical Evolution."

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

RINKING AS A SCHOOL EXERCISE.

IN the course of a series of articles on scholastic hygiene, now being published in the *Gesundheit*, Professor Reclam advocates the arrangement, where practicable, of a skating-rink in connexion with schools. The mental advantages derived from this exercise are, he asserts, more numerous than might generally be supposed, inasmuch as it involves rapidity of thought and presence of mind in keeping clear of collisions, thus partaking of the elements tending to form the character, which are also claimed by German authorities for gymnastic exercises as carried out in their *Turnvereine*. Amongst the physical advantages of rinking, he enumerates the more noble and graceful carriage of the body which is induced by the maintenance of equilibrium, and the greater uniformity which it establishes in the distribution of the blood through the various portions of the body, this process being, it is remarked, specially desirable during the interval which separates the morning's tasks from those of the afternoon. It is also asserted that roller-skating is an excellent remedy for the excessive flow of blood to the head which so often manifests itself in weakly yet diligent pupils by bleeding of the nose. Dr. Reclam considers that pupils of ten years of age and upwards may be freely allowed to participate in this exercise.

Lex.—The Births and Deaths Registration Acts relating to Ireland and Scotland are not in all respects identical with that in operation in England. Uncertified causes of death are much more numerous both in Ireland and in Scotland than in England.

"THE HINDRANCES TO GENERAL PRACTICE."

To the Editor of THE LANCET.

SIR,—I think most men in general practice can endorse the remarks of "A General Practitioner," in your issue of the 17th inst. I could mention a city in the West of England in which there are two free dispensaries, and those of the out-patients at the hospital who are unable to attend are visited at their own homes. Now, I would ask, is it probable that an individual would pay the usual market price for a mutton-chop or a loaf of bread if he could get the same things for nothing? How can the general practitioner expect even half a crown fee from the commonly-called working or lower middle classes when they can go to a hospital or dispensary and obtain medical attendance without any payment?

I do not wish to defend the sixpenny dispensary practice, although I consider that we have to thank ourselves for it, as it is partly the result of a system of gratuitous work; and I am inclined to think that if those engaged in union, club, or provident dispensary work—say at four shillings per member per annum—were to make a calculation of the fee per visit or consultation, it would not average more than sixpence or a shilling. I am only making a comparison in a pecuniary light; of course they are all, more or less, unsatisfactory.

What we require is a nearer approach to unanimity regarding fees, and that those engaged in hospital out-patient or free dispensary practice, for the welfare of the profession, decline any longer to work for nothing.

I am, Sir, yours faithfully,

March 20th, 1883. SUBSCRIBER SINCE '65.

"INFANTILE HERNIA."

To the Editor of THE LANCET.

SIR,—I can well enter into your correspondent's difficulties with regard to the management of the above. He will find, however, an indiarubber truss, made by Alante, of Paris, a very efficient appliance. It is easily adjusted, keeps its place, and is in every way satisfactory. Salt of Birmingham—or I dare say any instrument maker—can supply them. The cost (15s.) is very great considering the simplicity of the contrivance.

I am, Sir, yours obediently,

Windermere, March 26th, 1883. ARCHD. HAMILTON, M.D.

"THE DISPOSAL OF CITY WAIFS."

It may be well to point out that the benevolent persons who have hitherto organised homes for destitute children, afterwards placing them in Canadian and other colonial families, are most anxious to encourage Government supervision, and subscribers would welcome the additional guarantee thus afforded. Dr. M'Gryor of Edinburgh, who has recently been looked upon as a special authority on the social aspects of Canadian life, and others, have afforded testimony to the satisfactory working of a scheme favourably referred to by us; and newspapers from the Cape and New Zealand now to hand are at one in pointing to the advantages which these colonies offer for the disposal of poor children untainted by crime, who would be welcomed by hundreds of families, and brought up to fill useful and lucrative posts in their new homes, where pauperism is all but unknown. There are few outlets for philanthropic effort where so much good work can be done at so small a cost.

Mr. T. S. Lacy.—The patient is, in the long run, entitled absolutely to determine her medical attendant. But we think still that, in the given case, the consultant should have insisted on co-operating with the regular medical attendant.

TREATMENT OF ERYSIPELAS.

To the Editor of THE LANCET.

SIR,—A case of erysipelas has just been under my care where treatment on the same principle as that illustrated in THE LANCET on the 10th inst.—viz., protection from atmospheric influences—was adopted, with good result.

A healthy young women, aged twenty eight, had had a small boil on the back of the wrist. It was nearly well, when a sudden erythematous blush appeared in its neighbourhood. It rapidly spread over the back of the hand and up the arm, with much swelling, and the rapid formation of bullæ of various sizes, which in the course of two or three days almost completely covered the surface from the wrist to the elbow. In the upper arm the redness and swelling extended as far as the shoulder, but without vesicular eruption. There was much pain and tenderness of the affected part and also in the axilla, with considerable constitutional disturbance. Moist, soothing applications were first used, but the serous discharge being very copious, resort was had to "dry" treatment. The lower arm was thickly coated with zinc oxide and starch flour, enveloped in a double layer of cotton-wool, and lightly bandaged. The upper arm and the hand were painted with tincture of iodine, and a solution of iron prescribed internally. This treatment speedily checked the flow of serum, but for the first day or two it oozed through at several points. These were thickly covered with more powder, and the cotton-wool reapplied as before. The pain and swelling of the arm and hand speedily declined, the general condition improved *pari passu*, and the patient complained merely of an itching feeling in the fore arm. This was relieved by dipping the arm for a few moments into warm water, the layer of powder, now forming a crust, being disturbed as little as possible. It was then gently dried, more powder dredged on, and the whole enveloped again in cotton-wool. Ten days after the first appearance of the vesicles it was thought desirable to examine the arm. The encrusting powder was carefully soaked off, and the arm beneath was found to be perfectly healed. There were one or two spots where the new cuticle was pink and thin, but the arm was practically well, and a very slight protection was all that was further needed.

I am, Sir, yours, &c.,

March 19th, 1883. M.R.C.S.

Mr. Theodore Fennell.—Such a person will come under the penal clause of the Bill, which our correspondent will find in THE LANCET of last week.

Dentist.—It seems to us that, as a rule, a principal should not charge a pupil for such services.

Rustic.—Wilson's Handbook.

"INTESTINAL OBSTRUCTION; BENEFICIAL ACTION OF THE EXTERNAL APPLICATION OF BELLADONNA."

To the Editor of THE LANCET.

SIR,—The following notes may be of interest to you, as confirming the beneficial action of belladonna in the above cases, as reported in your issue of March 24th, from Stanley Hospital, Liverpool.

On Feb. 4th, 1882, I was called in to see Mrs. B——, who was suffering from fæcal vomiting, with great prostration. There was pain in the abdomen, without distension; no hernia or bowel could be felt; the pulse was frequent and intermittent. The bowels had not been opened for a week, although she had taken purgatives. She was ordered one-grain doses of opium, strong beef-tea, and coffee. Next day the vomiting continued, and there was great emaciation, with slight delirium, the teeth and lips being covered with sordes. As death seemed imminent, belladonna was freely applied over the whole of the abdomen. On the 6th the vomiting ceased entirely, and the bowels were freely opened. An evacuation took place next day. Her improvement continued steadily from this date till the 20th, when I left off attending.

I am, Sir, yours truly,

THOMAS LIVINGSTONE, M.D.

Greenbank, Stanhope, March 28th, 1883.

THE BILL AND THE OFFICERS OF EXISTING INSTITUTIONS.

Confido.—Our correspondent takes too gloomy a view of the future of the existing bodies. All of them should not be continued as a tax on the profession. It is obvious that several of them are superfluous. The fittest will survive, with fresh life and greater responsibilities. As with the institutions so with their officers, of whom the Bill is not altogether unmindful.

NOTIFICATION OF INFECTIOUS DISEASE.

To the Editor of THE LANCET.

SIR,—I send you enclosed correspondence between Dr. Seaton and myself, with the request that you will publish it in your columns, and make any comments you think fit. The evidence upon which Dr. Seaton charges me with "obvious untruth," and endeavours to justify his statement, is as follows:—"I think I am correct in saying that this epidemic of small-pox was greater than the one which occurred in 1871, when we had not the same facilities. I think this has been a more extensive and severe epidemic than that of 1871-2, which was just the time of the appointment of the medical officer of health" (p. 217, Q. 877, City of Liverpool Notification of Infectious Disease Evidence). I do not wish to prejudice the question between Dr. Seaton and myself in any degree, but I would point out that this evidence was not given as a statement of fact, but as a guarded expression of belief and opinion only.

I am, Sir, yours obediently,

J. O. BROOKHOUSE, M.D.,

Physician to the General Hospital, Nottingham.

Nottingham, March 14th, 1883.

"Nottingham, March 12th, 1883.

"Sir,—In your recent report on 'Notification to the Health Committee of the Nottingham Town Council,' and copied into the local daily papers, you refer to me as having made a statement 'obviously untrue,' and draw attention in foot notes to my evidence before the Liverpool deputation in support of your statement. There is nothing in the quotation to warrant your allegation, and, indeed had there been, nothing to justify you in deliberately charging me with 'obvious untruth.' I have lived and practised here for upwards of a quarter of a century, and have never before had any aspersion cast upon my character; and I certainly shall not permit you with impunity to do so, or endeavour to prejudice me in public esteem at this period of time. I must, therefore, call upon you to prove what you have said, or to withdraw and apologise for so offensive and unjust an imputation. I beg to inform you that the correspondence between us will be made public.—Yours truly,

"To Dr. Seaton." "J. O. BROOKHOUSE.

"Municipal Offices, Nottingham Health Department,
"March 13th, 1883.

"Sir,—In my report on the 'Notification of Infectious Diseases to the Health Committee of the Town Council,' I used the words 'obviously untrue' solely in the sense of being obviously contrary to the facts. In this sense I conceive that the quotation from your evidence that I have given in the report fully justifies such expression.

"I quite agree with you that the correspondence between us should be published. "I am, your obedient servant,

"Dr. Brookhouse." "EDWARD SEATON.

"Nottingham, March 14th, 1883.

"Sir,—I have to acknowledge the receipt of your letter of the 13th inst., in which you attempt to justify your description of my evidence on notification before the Liverpool Commission as 'obviously untrue' on the ground that you used the words 'solely in the sense of being obviously contrary to the facts.' It is unfortunate for you that your own report carries with it a refutation of the excuse you offer. Here are your own words, 'I have read this' (the volume published by the Health Committee of the Liverpool Corporation) 'through carefully, and setting aside statements which are without foundation, beside the mark, and calculated to be misleading, and also those which are obviously untrue, as, for instance, that of Dr. Brookhouse,' &c., &c. Now, had you intended only to convey that I had stated something 'obviously contrary to the facts,' it would have been sufficient to allude to my evidence as containing a statement or 'statements which are without foundation and calculated to be misleading,' but in truth you wanted to do more, and I am glad therefore that at least you agree with me that the correspondence between us should be published, so that the profession and public may be able to judge not only of the letter, but of the spirit, in which your report was framed and issued, and also of the value and trustworthiness of your disavowal of the offensive imputation to me of 'obvious untruth' in the general and conventional sense of the words.

"Yours truly,

"To Dr. Seaton." "J. O. BROOKHOUSE.

"Municipal Offices, Nottingham Health Department,
"March 15th, 1883.

"Sir,—On receiving your letter of the 12th inst., I at once explained the sense in which I used the words in my report to which you objected. Having done so, I am surprised that you have not accepted the interpretation which I myself distinctly say I intended to be put upon them. Under the circumstances I can see no possible advantage in continuing the correspondence, which should, I think, be made public at once.

"I am, your obedient servant,

"Dr. Brookhouse." "EDWARD SEATON.

COTTAGE HOSPITAL FOR THE SURREY DOCKS.

IT is stated in "Our Work," the monthly magazine of the Kilburn Sisters, whose work amongst the poor is widely known and appreciated, that they have secured a small house, capable of holding six beds, and intend to open it as an accident hospital at Rotherhithe. It is pointed out that there is at present no hospital readily available for accidents occurring in the Surrey Docks. The Miller Memorial Hospital will be a long way from the Surrey Docks, and the Seamen's Hospital, Greenwich, to which accidents are now sent, is further away still. The work undertaken by the Kilburn Sisters is excellent, and we hope they will speedily be able to raise the £500 they require for their little accident hospital, which deserves all possible success.

METROPOLITAN PROVIDENT MEDICAL ASSOCIATION.

To the Editor of THE LANCET.

SIR,—It is proposed to establish a branch of the Metropolitan Provident Medical Association at Dalston. Will you kindly allow me, through the medium of your journal, to enlighten the medical men of the district upon the effect the establishment of a branch will probably exercise upon their practices if they co-operate in the movement? The promoters fondly imagine if they concern themselves at all upon this point that the subscriptions will come for the most part from persons who are in the habit of resorting to hospitals for medical relief, but I know from experience that their subscribers will be drawn from that class who are accustomed and can well afford to pay their medical attendant a fee of two shillings or half a crown. A medical friend, who was induced to offer his services to a branch of the Association in another part of town, assures me that some of his private patients, who were well able to pay his ordinary visiting-fee, subscribed to the dispensary and entered their names upon his list, thereby securing his services as their medical attendant. If the remuneration were at all adequate to the work done there would be no cause for complaint, but when a cheque for about eight pounds is sent one for some fifteen weeks' attendance, including visits at patients' own homes, I think you will allow that the dispensary is not self-supporting, as the promoters claim, but supported rather by the charity—I had almost said weakness—of the medical officers. No other professional man is called upon to make such sacrifices, and why should medical men lend their support to schemes of this kind, irrespective of their own interests? Many persons are induced to become subscribers to the Association because they see the names of old-established and respected members of the profession resident in the neighbourhood upon the medical staff. Let them withhold this support, so that the Association stand or fall upon its own merits.

I am, Sir, yours, &c.,

March 13th, 1883. A GENERAL PRACTITIONER.

T. S. M.—THE LANCET, Feb. 12th, 1881, p. 276.

Dr. Robert Kirk.—Next week.

Mr. Guy S. Porter.—One guinea a day.

RHEUMATIC ARTHRITIS.

To the Editor of THE LANCET.

SIR,—We have under medical treatment a number of lambs suffering from the above. The disease is very fatal. The temperature is 107° F., 103° F. being normal. The knee, hock, and fetlock joints are much swollen, and the inflammation is so intense as to cause the formation of large quantities of curd-like pus at these parts. I think I may say that the affection is undoubtedly due to an acid condition of the milk of the ewes; at any rate, this secretion gives an acid reaction.

Treatment:—Alteration of food; sheltering and surgically attending to the suffering animals, and the administration of alkalines, and tonics to the ewes. This method of combating the disease has hitherto been successful. As facts seem to prove that this malady is really due to an acid state of the ewes' milk, does it not go a long way to strengthen the theory that rheumatism is due to an excess of lactic acid in the blood?

I am, Sir, yours faithfully,

ROBERT J. DAWSON, M.R.C.V.S.

Upgate, Louth, Lincolnshire, March 20th, 1883.

MEDICAL RESULTS OF THE FORBES MACKENZIE ACT IN SCOTLAND.

To the Editor of THE LANCET.

SIR,—Permit me, as a Scotchman who had opportunities of closely watching the operation of the Forbes Mackenzie Act after it first came into operation, to assure you that that Act has not increased the number and extent of shebeens in Scotland. The closest inquiry has again and again proved the exceeding usefulness of the Act and its beneficial influence on Sunday drunkenness. If you refer to the Report of the Royal Commission, obtained at the instance of the spirit trade, you will find that, in response to a question of mine, the representative witness of the Royal Infirmary at Glasgow testified that after the passing of the Act it was no longer necessary for a surgeon to sit up till Monday morning to attend to broken heads through drink. If you inquire of the superintendents of police and other authorities likely to know the truth, you will have but one testimony to the valuable results of the Forbes Mackenzie Act.—I am, Sir, your obedient servant,

Grove-road, Regent's-park, London, N.W., NORMAN KERR, M.D.

March 20th, 1883.

APOMORPHIA.

To the Editor of THE LANCET.

SIR,—*In re* apomorphia, the following episode may perhaps prove amusing and instructive. A short time ago I happened to be making some morphia suppositories, and, in absence of orthodox excipient, used mutton fat. My attention being momentarily distracted, I found on return to my mutton the mass *non est*, and my dog, who had been taking a keen interest in the operation, was licking his jaws, and wagging his tail in such a deprecatory manner as to leave no doubt in my mind as to the misapplication of the suppositories. The dog being a valuable one—a greyhound, and my time fully occupied, I immediately prepared an hypodermic injection, using one of Savory and Moore's ordinary gelatine discs containing apomorphia 1-10th of a grain. This dose was injected into the shoulder. Calling the dog, we proceeded to the garden, where in about two minutes the remedy acted, complete evacuation of the stomach being the result. The dog seemed to feel the effects of the dose severely, the legs trembling and cowering as if unable to support him. Finding he had expelled the morphia mass apparently unaltered I administered fifteen minims of brandy and some strong cold tea, and in less than seven minutes after the commission of the theft he rejoined me in the surgery none the worse for his escapade. He had only swallowed twelve grains of the acetate of morphia. I have also used apomorphia with the happiest results in a case of alcoholic coma, and once in the case of a native infant with chronic bronchitis whose tubes were much laden with mucus. In this case apomorphia acted when ipecacuanha and sulphate of copper in repeated doses had proved ineffectual. I administered here 1-10th of a disc (1-100th of a grain).

The great point in the hypodermic use of apomorphia appears to be the certainty and rapidity of its action.

I am, Sir, yours truly,

FRED. W. REES, District Surgeon.

Bedford, South Africa, Jan. 23rd, 1882.

Dr. John Morris (Baltimore).—We cannot promise. If the paper be forwarded, it shall be duly considered.

CONCRETION BENEATH THE TONGUE.

To the Editor of THE LANCET.

SIR,—You may perhaps think the account of the following case of sufficient interest for insertion in your journal.

A young man consulted me last week, giving the following history: About three weeks ago he noticed the motions of his tongue caused some slight discomfort, not amounting to actual pain, and he then first observed a swelling beneath it; these symptoms did not trouble him much, till on the evening of the day on which I saw him, while at a meal, he felt something pricking his mouth, and standing before a looking-glass he saw a "white stone" protruding from beneath his tongue, which (the stone, not the tongue) he pulled out with his fingers, and brought for my inspection. On examining his mouth an aperture was seen beneath the tongue, on the left of the frænum (in the usual situation of a ranula), and on passing a probe it was found to lead into a cavity, which extended backwards and inwards behind the frænum for about three-quarters of an inch, and in which the stone had evidently lain. The calculus is about the size and shape of an ordinary date stone, and much resembles in appearance a phosphatic calculus; it is friable, laminated, and has a small nucleus which is harder and darker than the rest of the stone. I do not know if calcareous deposits or degenerations are common in the region of the tongue; Druitt says (Vade Mecum, p. 478), that "the cyst of a ranula when dermoid may become mortar-like or almost solid;" but I think the noticeable features of this case are, the small amount of inconvenience which the calculus caused, for it must have existed for some length of time, and the easy and natural method by which my patient was able to relieve himself. I should add that the left submaxillary gland was swollen and tender, but otherwise the man was in good health. I am, Sir, yours, &c.,

Brady-street, E., March 20th, 1883. R. GEO. STYLE, M.R.C.S.

Decubitus.—The paper is marked for insertion.

Medical Practitioner.—No.

Mr. Wooton.—We are unable to devote more space to the subject.

WHAT APPEARS TO BE A CASE OF SPONTANEOUS FRACTURE OF THE FEMUR.

To the Editor of THE LANCET.

SIR,—While engaged at the vaccination station (Tyne-street) lately, I was suddenly called to the other side of the street to see a child, aged six years, who, as the mother reported, was simply walking across the floor when its leg doubled up, the child falling instantly to that side. When I got over (only a distance of about twenty yards), I found the femur fractured in the middle third, and while getting the bandage &c. ready, Dr. Burt arrived, when we had the leg put up, the mother positively asserting that she was looking at the child walking over the floor at the time, and that there was no stumbling or anything, but only the leg seemed to double by the mere act of walking. It may be mentioned that the child did not seem to be in the best of health, although nothing very particular could be detected about it.

I am, Sir, yours &c.,

JOHN RANKINE, L.R.C.S. & P.Ed.

Ward-terrace, Sunderland, March, 1883.

"MEDICAL TESTIMONIALS IN A HAIRDRESSER'S SHOP."

UNDER this head last week we spoke of testimonials in favour of Dr. Duigan. We should have said in favour of Dr. George Fyfe. We regret the error.

"DOING THE CONGREGATIONS."

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to lay before the readers of THE LANCET for their edification and reflection a remark that was made to me a few weeks ago by a highly respectable clergyman?

"How is it," said the rev. gentleman, "that I can hardly go to church on a Sunday morning without seeing in the short distance I have to walk at least half a dozen medical gentlemen driving at a rapid pace, and giving one the idea that a serious amount of illness had suddenly broken out in the town?"

I did not care to give a precise explanation to the gentleman of the simple facts, but I hazarded the not very lucid opinion that an unusual increase of illness might occur on Sunday mornings, which would explain the great activity of medical gentlemen on that day. On Saturday evenings, on account of good wages received, and the pleasurable consciousness that the labours of the week were ended, a larger amount of the "good things of this life" might be indulged in, and, as a consequence, an epidemic of satiety might break out just as people were going to and returning from their respective places of worship. This, the reverend gentleman said, might be all very well and correct, but he had his own opinion on the matter.

Most medical men know that "doing the congregations" is an old threadbare practice, that might now be allowed to die out. The men who resort to it are not the good and true men of the profession—the men who depend upon their abilities and are above resorting to questionable means to gain notoriety. Of course medical men are obliged to visit patients on Sundays as well as on week days, but such visits paid on the day of rest should be looked upon as works of necessity, and should be done, I think, in as quiet and in as unobstrusive a way as possible. Ministering to the sick should be received in the same light as leading the ox or the ass to the water, or as lifting a sheep out of the pit into which it had fallen, or as feeding dumb animals. I hope you will agree with me that the healing art should never for selfish purposes be ostentatiously displayed on the Christian Sabbath. I also hope you will agree with me in thinking that a medical man, excepting from necessity, should never employ his servants or his horses on the day of rest.

I am, Sir, yours truly,

February 20th, 1883. M.D.

ERRATA.—In the account of the case of Spinal Abscess at the County Donegal Hospital, given in our impression of the 17th inst., p. 453, first line of the second paragraph, by a printer's error the word "colourless" appeared for *odourless*.—In our Paris letter last week, page 521, the second line from the bottom, for "1-40th," read "1-140th part of a grain."

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Savory, London; Mr. M'Munn, London; Mr. Feldmann, London; Dr. Meek; Mr. Wheeler, Ilfracombe; Mr. Barton, Lifford; Mr. Dyke, Merthyr; Mr. A. C. Clarke, Durham; Mr. Voisey, Manchester; Dr. Archibald, St. Andrews; Dr. Orton, Newcastle-under-Lyne; Mr. Edgar Barnes, Eye; Mr. Jordan Lloyd, Birmingham; Mr. Reginald Harrison, Liverpool; Dr. Leslie Phillips, Birmingham; Dr. Norman Kerr, London; Dr. J. F. Bergmann, Wiesbaden; Dr. Hardwicke, Sheffield; Dr. Kirk, Partick; Mr. M'Caw, Portglendore; Dr. Turner, London; Mr. Payne, Bath; Mr. Whitford, London; Dr. Edgar Flinn; Dr. Atkins, Cork; Mr. Fennell, Washington, Co. Durham; Mr. Wright, Gainsborough; Dr. Hamilton, Windermere; Mr. Sharpin, Bedford; Mr. H. P. Berry, London; Dr. Tomkins, Manchester; Mr. S. J. Hutchinson, London; Dr. W. J. Collins, London; Dr. Copland, Dunedin; Mr. Horsman, London; Dr. Gabbett, London; Dr. Caddy, London; Messrs. Wyleys and Co., Coventry; Mr. W. J. Kilner, London; Mr. Frank Spence, Manchester; Mr. Milner, Godalming; Mr. Anderson, St. Andrews; Mr. Porter, London; Dr. Adams, Dumfries; Dr. M'Call Anderson, Glasgow; Mr. Crothers, Torquay; Mr. Mody, Bombay; Mr. Lawson Tait; Mr. Noxwell, Greenwich; Dr. Thomas, Glasgow; Mr. Brown, West Bromwich; Mr. Jones, Mitcheldean; Mr. Proctor, Sheffnal; Mr. Davies, Bath; Dr. Davidson, Liverpool; Mr. Price, Kettering; Messrs. Longmans and Co., London; Messrs. Norton and Co., Llanelly; Messrs. Atkinson and Co., Kendal; Messrs. Baiss and Co., London; Mr. H. Kimpton, London; Mr. Morton, Liverpool; Messrs. Beal and Co., Brighton; Messrs. Cox Brothers, Williton; Messrs. Lee and Martin; Dr. Morris, Baltimore; Miss Walker, Liverpool; Mr. Finch; Messrs. Maclehose and Co., Glasgow; Dr. Larkies; Mr. Rosenthal, London; Mr. Byerley, Portsmouth; Mr. Edward Haxley, London; Mr. Morrison, Calcutta; Mr. Hubbard, London; Mr. Ellison, Windsor; Mr. Gilbert, London; Dr. Campbell, Garlands; Mr. Allinson, London; Mr. Millican, Kinston; Dr. Garrod, London; Messrs. Oldman and Iveson, Gainsborough; Mr. Wright, Manchester; Rev. D. James, Winslow; Dr. Acland; Mr. Ulbrich, Pulina; Messrs. Woolley and Co., Manchester; Dr. Sturges, London; Mr. Armstrong, Newcastle-on-Tyne; Mr. Berthier, Paris; Mr. Maw, Bradford; Mr. Townsend, Exeter; Mr. Wood, Alderley-edge; Mr. Davies, Bristol; Mr. Harris, Liverpool; Mr. Betcombe, Colne; Mr. Petter, Yeovil; Mr. F. Treves, London; Dr. Macnaughton Jones; Dr. Andrew Wilson, Edinburgh; Dr. Herbert Snow, London; Mr. F. Edwards, London; Mr. Lewis Vague; Mr. Wright, Liverpool; Mr. Murray Smith, Romford; Mr. Vincent Jackson, Wolverhampton; Dr. Livingstone, Stanhope; Dr. C. H. F. Routh, London; Mr. Lowthian, Carlisle; Cinderella; M.D.; Anti-sentimental; A Country Practitioner; Equality; B.A., Dub.; Parmesan; M. S.; Medicus, Chester; B. B. B.; Dentist; Delta; D., Plymouth; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Pope, Nantiglo; Mr. Eberle, Thirsk; Messrs. Porteous and Co., Glasgow; Mr. Thomson, Oldham; Mr. Jennings, London; Messrs. Harvey and Reynolds, Leeds; Miss Walgermouth, Hollington; Mr. Sergeant, London; Dr. Bloxland, New South Wales; Mr. M'Gilvary, Church Stretton; Mr. Krohn, Glasgow; Miss Holme, Bath; Mr. Goodworth, Westerton; Mr. Gibson; Mr. Blyth, Norwich; Mr. Bryant, Leeds; Dr. Arthur, Mirfield; Dr. Rayner, Malvern; Mr. Lay, Great Ayton; Mr. Walker, Tamworth; Dr. Fisher, King's Langley; Dr. Mackley, Tunbridge-wells; Mr. Walton, Edgbaston; Mr. Allen, Cambridge; Mr. Pearce, London; Mr. Ross, Beccles; Miss Haynes, Holloway; Mr. May, Plymouth; Mr. M'Ewen; Messrs. May and Co., London; Dr. M'Carthy, Darlington; Miss Whitmore, Derby; Dr. Merryweather, Guisborough; Mr. Jones, Penydre; Dr. Thomas, Nantymoel; Miss Jebb, Stradone; Mr. Howson, Sneinton; Medicus, Cotherstone; Lex; K.Q.C.P.; D. E. F.; Bryant, Leeds; Cantab; R. N. H. T.; Surgeon, S. Shields; W. H. R.; F., Tottenham; X.; Theta; Fides; H. M. R., Manchester; Medicus, Glamorgan; Principal, Seaford; A. C. E., York; Nemo, Ayr; J. W., Burton-on-Trent; J. H. S.; F. B., Gainsborough; Scribo; Cantabrigia; A. B., Blaenavon; W. R. M., Lowestoft; H. B., Bournemouth; Alcali, Swansea; Montague, London; M.R.C.S., Hampstead; C. M., Plumstead; Albany-road; Rural; J. H., Kentish-town; Kensington; M.D.; Emigrant; L. B., Preston; Doctor; Surgeon; Somerset; Epsilon, Torquay; Nemo, Walton; S. R. B.; Zeinlich Preis; A. B., Forest-hill; Biceps, Uttoxeter; H. H., Whitechapel; &c., &c.

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An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

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Advertisements are now received at all Messrs. W. H. Smith and Sons' Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

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